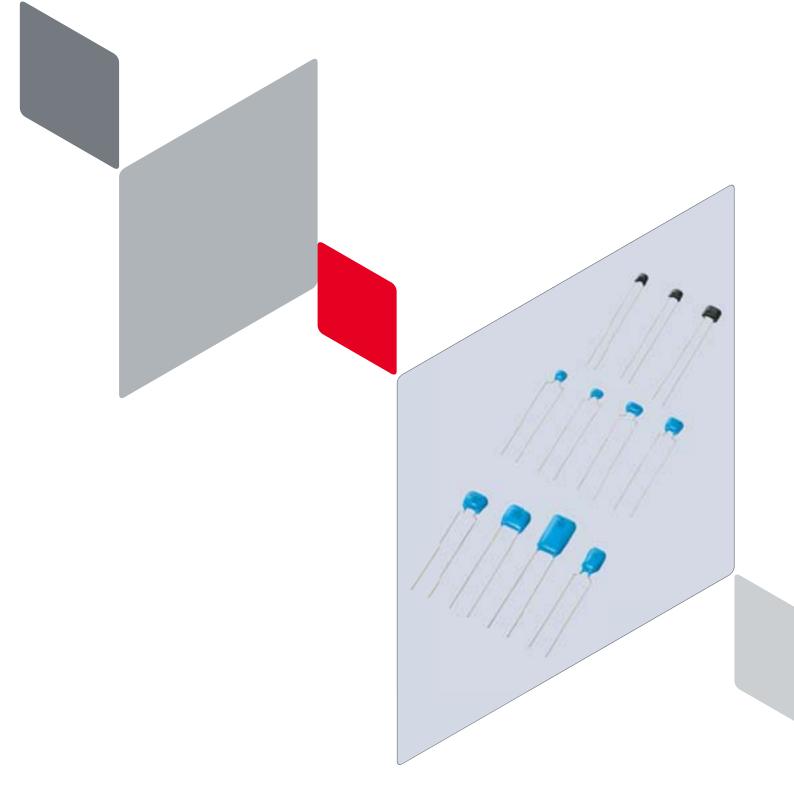


Leaded MLCC



EU RoHS Compliant

- All the products in this catalog comply with EU RoHS.
- EU RoHS is "the European Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment."
- For more details, please refer to our web page, "Murata's Approach for EU RoHS" (https://www.murata.com/en-eu/support/ compliance/rohs).

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Product specifications are as of October 2019.

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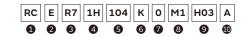
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Please check the MURATA website (https://www.murata.com/) if you cannot find a part number in this catalog.

• Part Numbering

Leaded MLCC

(Part Number)



1 Product ID

2Series

Product ID	Series Code	
RC	E	Leaded MLCC for Automotive
RH	E	150°C Operation Leaded MLCC for Automotive
RH	s	200°C Operation Leaded MLCC for Automotive
RD	E	Leaded MLCC for General Purpose

Temperature Characteristics

Temperatu	ıre Characte	ristic		Temperature Cha																	
Code	Public S	TD Code	Reference Temperature	Temperature Range	Capacitance Change or Temperature Coefficient	Operating Temperature Range															
5C	COG EIA		25°C	25 to 125°C	0±30ppm/°C	-55 to 125°C															
50			25-0	-55 to 25°C	0+30/-72ppm/°C	-55 10 125 C															
5G	X8G	*1	25°C	25 to 150°C	0±30ppm/°C	-55 to 150°C															
56	ABG	1	25-0	-55 to 25°C	0+30/-72ppm/°C	-55 10 150-C															
				-55 to 25°C	0+30/-72ppm/°C																
7G	7G CCG *1		25°C	25 to 125°C	0±30ppm/°C	-55 to 200°C															
				125 to 200°C	0+72/-30ppm/°C																
				-55 to 25°C	-750+120/-347ppm/°C																
7J	UNJ	UNJ *1	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1	*1	25°C	25 to 125°C	-750±120ppm/°C	-55 to 200°C
				125 to 200°C	-750+347/-120ppm/°C																
7U		EIA	25°C	25 to 125°C*2	-750±120ppm/°C	FF += 12500															
70	U2J	EIA	25°C	-55 to 25°C -750+120/-347ppm/°C		-55 to 125°C															
C7	X7S	EIA	25°C	-55 to 125°C	±22%	-55 to 125°C															
D7	X7T	EIA	25°C	-55 to 125°C	+22%, -33%	-55 to 125°C															
L8	X8L	*1	25°C	-55 to 150°C	+15%, -40%	-55 to 150°C															
R7	X7R	EIA	25°C	-55 to 125°C	±15%	-55 to 125°C															
Q9	X9Q	*1	25°C	-55 to 200°C	+15%, -70%	-55 to 200°C															

*1 Murata Temperature Characteristic Code.

*2 Rated Voltage 100Vdc max: 25 to 85°C

4 Rated Voltage

Code	Rated Voltage
1E	DC25V
1H	DC50V
2A	DC100V
2D	DC200V
2E	DC250V
2W	DC450V
2H	DC500V
2J	DC630V
ЗА	DC1kV

Capacitance

Expressed by three figures. The unit is pico-farad (pF). The first and second figures are significant digits, and the third figure expresses the number of zeros that follow the two numbers. If there is a decimal point, it is expressed by the capital letter "**R**." In this case, all figures are significant digits.

GCapacitance Tolerance

Code	Capacitance Tolerance
с	±0.25pF
D	±0.5pF
J	±5%
к	±10%
М	±20%

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Dimensions (LxW)

Code		Dimensions (LxW)					
	RCE Series	3.6×3.5mm max.					
	RHE Series	5.6×5.51111111dX.					
0	RHS Series	3.9×3.5mm max.					
	RDE Series	4.0×3.5mm max. or 5.0×3.5mm max. (Depends on Part Number List)					
	RCE Series	4 0×3 5mm max					
	RHE Series	4.0×3.5mm max.					
1	RHS Series	4.2×3.5mm max.					
	RDE Series	4.5×3.5mm max. or 5.0×3.5mm max. (Depends on Part Number List)					
2		5.5×4.0mm max.					
3		5.5×5.0mm max.					
4		7.5×5.5mm max.					
5	7.5×7.5mm max. (DC630V, DC1kV : 7.5×8.0mm max.)						
U	7.5×12.5mm max. (DC630V, DC1kV : 7.5×13.0mm max.)						
w		5.5×7.5mm max.					

8 Lead Style

Code	Lead Style	Lead Spacing		
A2	Straight Long	2.5mm		
B1	Straight Long	5.0mm		
DB/DG	Straight Taping	2.5mm		
E1	Straight Taping	5.0mm		
К1	Inside Crimp	5.0mm		
M1/M2	Inside Crimp Taping	5.0mm		
P1	Outside Crimp	2.5mm		
S1	Outside Crimp Taping	2.5mm		

Individual Specification Code
Expressed by three figures

Packaging

Code	Packaging
А	Ammo Pack
В	Bulk

Leaded MLCC for Automotive

T max.

ød: 0.5±0.05

(in mm)

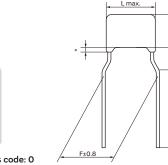
W1 max.

RCE Series (DC25V-DC1kV)

Features

1

- 1. Small size and large capacitance
- 2. Low ESR and ESL suitable for high frequency
- 3. Meet AEC-Q200, ISO7637-2 (surge test) requirement
- 4. Meet LF (Lead Free) and HF (Halogen Free)
- 5. Flow soldering and welding are available. (Re-flow soldering is not available.)
- 6. If copper wire is necessary at welding process, copper wire is available based on request.



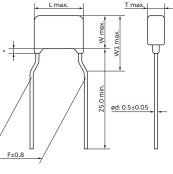
Dimensions code: 0 Lead style code: K1



Lead style code: K1

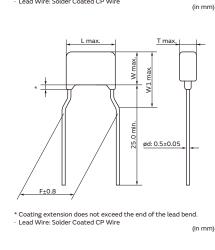
Dimensions code: 2

Lead style code: K1

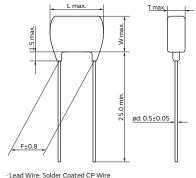


Coating extension does not exceed the end of the lead bend. Lead Wire: Solder Coated CP Wire

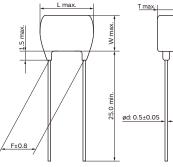
* Coating extension does not exceed the end of the lead bend. • Lead Wire: Solder Coated CP Wire



Dimensions code: 0 Lead style code: A2



J CP Wile



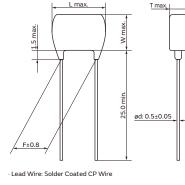
Dimensions code: 1 Lead style code: A2

· Lead Wire: Solder Coated CP Wire

(in mm)

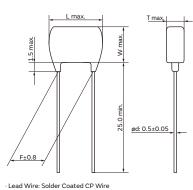
(in mm)

Dimensions code: 2 Lead style code: A2



(in mm)

Dimensions code: 3 Lead style code: A2



(in mm)

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T max,

ød: 0.5±0.05

W max.

25.0 mir

W1 max.

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L max. Tmax W max. max. W1

ц.

25.01

ød: 0.5±0.05

+

F±0.8





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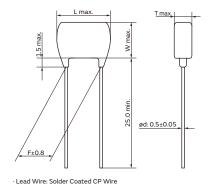
* Coating extension does not exceed the end of the lead bend. · Lead Wire: Solder Coated CP Wire (in mm)

L max.

* ‡

F±0.8

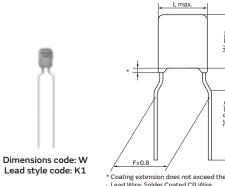




Dimensions code: 5 Lead style code: B1

(in mm)

T max.



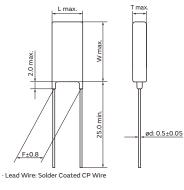
W max. max. W1 25.0 min ød: 0.5±0.05 Coating extension does not exceed the end of the lead bend. Lead Wire: Solder Coated CP Wire

(in mm)

Dimensions code: 4 Lead style code: K1

* Coating extension does not exceed the end of the lead bend. · Lead Wire: Solder Coated CP Wire (in mm)





(in mm)

Dimensions

Dimensions and		Dimensions (mm)								
Lead Style Code	L	W	W1	Т	F	d				
0A2/0DB	3.6	3.5	-		2.5	0.5				
0K1/0M1	3.6	3.5	6.0		5.0	0.5				
1A2/1DB	4.0	3.5	-		2.5	0.5				
1K1/1M1	4.0	3.5	5.0		5.0	0.5				
2A2/2DB	5.5	4.0	-		2.5	0.5				
2K1/2M1	5.5	4.0	6.0	See the individual	5.0	0.5				
3A2/3DB	5.5	5.0	-	product specification	2.5	0.5				
3K1/3M1	5.5	5.0	7.5		5.0	0.5				
4K1/4M1	7.5	5.5	8.0		5.0	0.5				
5B1/5E1	7.5	7.5*	-		5.0	0.5				
UB1/UE1	7.7	12.5*	-		5.0	0.5				
WK1/WM1	5.5	7.5	10.0		5.0	0.5				

*DC630V, DC1kV: W+0.5mm

ł	2	7	1	
			I	
r	-		1	٦

Marking										
Rated Voltage	DC25V		DC50V			DC100V		DC250V	DC630V	DC1kV
Dimensions Temp. Code Char.	X7R	COG	X7S	X7R	C0G	X7S	X7R	>	(7R, U2J, C0	G
0			-			-		-	-	-
1	(224K)	A 102J	(105к)	(224K)	A 102J	-	(224K)	U 102J (U2J) (U2J)		-
2	(C ⁴⁷⁵ K2C	(H 563 J5A)	(C ⁴⁷⁵)	(CH105)	(C ¹⁰³)	_	(CH105 K1C)	(C 103 J4U (U2J) (U2J) (K7R) (X7R) (C 0G)	(C 472 (J7U) (U2J) (W153 (K7C) (X7R) (C 0G)	$(\textcircled{M}^{102}_{JAU})$ $(U2J)$ $(\textcircled{M}^{102}_{KAC})$ $(X7R)$ $(\textcircled{M}^{102}_{JAA})$ $(C0G)$
3, 4, W	(M226) K2C	_	(ᠿ106 K5C)	(⁽ M335) K5C)	-	(M225 K1C)	_	(^(m) 473 J4U (U2J) (^(m) 224 K4C (X7R)	(^{(m103} J7U) (U2J) (^{(m104} K7C) (X7R)	(C)472 JAU (U2J) (C)333 KAC (X7R)
5, U	-	-	-	_	-	-	_	-	(12 J) (U2 J) (U2 J) (V2 J) (V2 J) (X7R)	(U2J) (U2J) (U2A) (U2A) (U2A) (U2A) (U2A) (U2A) (U2A)
Temperature Characteristics		•	G char.: A, X7 se refer to th			: U)		<u> </u>		
Nominal Capacitance	-		alue 100pF			figures				
Capacitance Tolerance	Marked w A part is o		se refer to th	e marking ex	ample.)					
Rated Voltage			25V: 2, DC50 se refer to th			/: 4, DC630\	': 7, DC1kV: A	A)		
Manufacturer's Identification	Marked w A part is o		se refer to th	e marking ex	ample.)					

Temperature Compensating Type, COG/U2J Characteristics

Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RCE5C1H1R0C0 H03	COG (EIA)	50Vdc	1.0pF±0.25pF	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H1R0C0 H03	COG (EIA)	50Vdc	1.0pF±0.25pF	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H2R0C0 H03	COG (EIA)	50Vdc	2.0pF±0.25pF	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H2R0C0 H03	COG (EIA)	50Vdc	2.0pF±0.25pF	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H3R0C0 H03	COG (EIA)	50Vdc	3.0pF±0.25pF	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H3R0C0 H03	COG (EIA)	50Vdc	3.0pF±0.25pF	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H4R0C0 H03	COG (EIA)	50Vdc	4.0pF±0.25pF	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H4R0C0 H03	COG (EIA)	50Vdc	4.0pF±0.25pF	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H5R0C0 H03	COG (EIA)	50Vdc	5.0pF±0.25pF	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H5R0C0 H03	COG (EIA)	50Vdc	5.0pF±0.25pF	3.6×3.5	2.5	5.0	K1	M1

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RCE5C1H6R0D0	COG (EIA)	50Vdc	6.0pF±0.5pF	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H6R0D0 H03	COG (EIA)	50Vdc	6.0pF±0.5pF	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H7R0D0 H03	COG (EIA)	50Vdc	7.0pF±0.5pF	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H7R0D0 H03	COG (EIA)	50Vdc	7.0pF±0.5pF	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H8R0D0 H03	COG (EIA)	50Vdc	8.0pF±0.5pF	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H8R0D0 H03	COG (EIA)	50Vdc	8.0pF±0.5pF	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H9R0D0 H03	COG (EIA)	50Vdc	9.0pF±0.5pF	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H9R0D0 H03	COG (EIA)	50Vdc	9.0pF±0.5pF	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H100J0	COG (EIA)	50Vdc	10pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H100J0	COG (EIA)	50Vdc	10pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H120J0	COG (EIA)	50Vdc	12pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H120J0 H03	COG (EIA)	50Vdc	12pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H150J0	COG (EIA)	50Vdc	15pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H150J0	COG (EIA)	50Vdc	15pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H180J0 H03	COG (EIA)	50Vdc	18pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H180J0 H03	COG (EIA)	50Vdc	18pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H220J0 H03	COG (EIA)	50Vdc	22pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H220J0 H03	COG (EIA)	50Vdc	22pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H270J0 H03	COG (EIA)	50Vdc	27pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H270J0 H03	COG (EIA)	50Vdc	27pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H330J0 H03	COG (EIA)	50Vdc	33pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H330J0 H03	COG (EIA)	50Vdc	33pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H390J0	COG (EIA)	50Vdc	39pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H390J0	COG (EIA)	50Vdc	39pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H470J0	COG (EIA)	50Vdc	47pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H470J0 H03	COG (EIA)	50Vdc	47pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H560J0	COG (EIA)	50Vdc	56pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H560J0	COG (EIA)	50Vdc	56pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H680J0	COG (EIA)	50Vdc	68pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H680J0	COG (EIA)	50Vdc	68pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H820J0 H03	COG (EIA)	50Vdc	82pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H820J0	COG (EIA)	50Vdc	82pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H101J0	COG (EIA)	50Vdc	100pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H101J0	COG (EIA)	50Vdc	100pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H121J0 H03	COG (EIA)	50Vdc	120pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H121J0 H03	COG (EIA)	50Vdc	120pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H151J0 H03	COG (EIA)	50Vdc	150pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H151J0 H03	COG (EIA)	50Vdc	150pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H181J0 H03	COG (EIA)	50Vdc	180pF±5%	3.6×3.5	2.5	2.5	A2	DB
	COG (EIA)	50Vdc	180pF±5%	3.6×3.5	2.5	5.0	K1	M1
	COG (EIA)	50Vdc	220pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H221J0 H03 RCE5C1H271J0 H03	COG (EIA) COG (EIA)	50Vdc 50Vdc	220pF±5% 270pF±5%	3.6×3.5 3.6×3.5	2.5 2.5	5.0 2.5	K1 A2	M1 DB
RCE5C1H271J0H03_	COG (EIA)	50Vdc	270pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H331J0_H03	COG (EIA)	50Vdc	330pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H331J0 H03	COG (EIA)	50Vdc	330pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H391J0 H03	COG (EIA)	50Vdc	390pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H391J0 H03	COG (EIA)	50Vdc	390pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H471J0 H03	COG (EIA)	50Vdc	470pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H471J0 H03	COG (EIA)	50Vdc	470pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H561J0	COG (EIA)	50Vdc	560pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H561J0 H03	COG (EIA)	50Vdc	560pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H681J0 H03	COG (EIA)	50Vdc	680pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H681J0 H03	COG (EIA)	50Vdc	680pF±5%	3.6×3.5	2.5	5.0	К1	M1
RCE5C1H821J0 H03	COG (EIA)	50Vdc	820pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H821J0 H03	COG (EIA)	50Vdc	820pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H102J0 H03	COG (EIA)	50Vdc	1000pF±5%	3.6×3.5	2.5	2.5	A2	DB



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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RCE5C1H102J0 H03	COG (EIA)	50Vdc	1000pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H122J0 H03	COG (EIA)	50Vdc	1200pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H122J0 H03	COG (EIA)	50Vdc	1200pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H152J0 H03	COG (EIA)	50Vdc	1500pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H152J0 H03	COG (EIA)	50Vdc	1500pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H182J0 H03	COG (EIA)	50Vdc	1800pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H182J0 H03	COG (EIA)	50Vdc	1800pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H222J0 H03	COG (EIA)	50Vdc	2200pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H222J0 H03	COG (EIA)	50Vdc	2200pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H272J0 H03	COG (EIA)	50Vdc	2700pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H272J0 H03	COG (EIA)	50Vdc	2700pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H332J0 H03	COG (EIA)	50Vdc	3300pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H332J0 H03	COG (EIA)	50Vdc	3300pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H392J0 H03	COG (EIA)	50Vdc	3900pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C1H392J0	COG (EIA)	50Vdc	3900pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C1H472J1 H03	COG (EIA)	50Vdc	4700pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C1H472J1 H03	COG (EIA)	50Vdc	4700pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C1H562J1	COG (EIA)	50Vdc	5600pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C1H562J1 H03	COG (EIA)	50Vdc	5600pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C1H682J1	COG (EIA)	50Vdc	6800pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C1H682J1	COG (EIA)	50Vdc	6800pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C1H822J1 H03	COG (EIA)	50Vdc	8200pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C1H822J1 H03	COG (EIA)	50Vdc	8200pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C1H103J1	COG (EIA)	50Vdc	10000pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C1H103J1	COG (EIA)	50Vdc	10000pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C1H123J1	COG (EIA)	50Vdc	12000pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C1H123J1 H03	COG (EIA)	50Vdc	12000pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C1H153J1	COG (EIA)	50Vdc	15000pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C1H153J1 H03	COG (EIA)	50Vdc	15000pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C1H183J1 H03	COG (EIA)	50Vdc	18000pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C1H183J1	COG (EIA)	50Vdc	18000pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C1H223J1 H03	COG (EIA)	50Vdc	22000pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C1H223J1 H03	COG (EIA)	50Vdc	22000pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C1H273J2 H03	COG (EIA)	50Vdc	27000pF±5%	5.5×4.0	3.15	2.5	A2	DB
RCE5C1H273J2 H03	COG (EIA)	50Vdc	27000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C1H333J2	COG (EIA)	50Vdc	33000pF±5%	5.5×4.0	3.15	2.5	A2	DB
RCE5C1H333J2	COG (EIA)	50Vdc	33000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C1H393J2 H03	COG (EIA)	50Vdc	39000pF±5%	5.5×4.0	3.15	2.5	A2	DB
RCE5C1H393J2	COG (EIA)	50Vdc	39000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C1H473J2	COG (EIA)	50Vdc	47000pF±5%	5.5×4.0	3.15	2.5	A2	DB
RCE5C1H473J2 H03	COG (EIA)	50Vdc	47000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C1H563J2	COG (EIA)	50Vdc	56000pF±5%	5.5×4.0	3.15	2.5	A2	DB
RCE5C1H563J2	COG (EIA)	50Vdc	56000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C1H683J2	COG (EIA)	50Vdc	68000pF±5%	5.5×4.0	3.15	2.5	A2	DB
RCE5C1H683J2	COG (EIA)	50Vdc	68000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C1H823J2	COG (EIA)	50Vdc	82000pF±5%	5.5×4.0	3.15	2.5	A2	DB
RCE5C1H823J2 H03	COG (EIA)	50Vdc	82000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C1H104J2 H03	COG (EIA)	50Vdc	0.1µF±5%	5.5×4.0	3.15	2.5	A2	DB
RCE5C1H104J2	COG (EIA)	50Vdc	0.1µF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2A1R0C0 H03	COG (EIA)	100Vdc	1.0pF±0.25pF	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A1R0C0 H03	COG (EIA)	100Vdc	1.0pF±0.25pF	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A2R0C0 H03	COG (EIA)	100Vdc	2.0pF±0.25pF	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A2R0C0 H03	COG (EIA)	100Vdc	2.0pF±0.25pF	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A3R0C0 H03	COG (EIA)	100Vdc	3.0pF±0.25pF	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A3R0C0 H03	COG (EIA)	100Vdc	3.0pF±0.25pF	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A4R0C0 H03	COG (EIA)	100Vdc	4.0pF±0.25pF	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A4R0C0 H03	COG (EIA)	100Vdc	4.0pF±0.25pF	3.6×3.5	2.5	5.0	K1	M1

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RCE5C2A5R0C0 H03	COG (EIA)	100Vdc	5.0pF±0.25pF	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A5R0C0 H03	COG (EIA)	100Vdc	5.0pF±0.25pF	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A6R0D0 H03	COG (EIA)	100Vdc	6.0pF±0.5pF	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A6R0D0 H03	COG (EIA)	100Vdc	6.0pF±0.5pF	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A7R0D0 H03	COG (EIA)	100Vdc	7.0pF±0.5pF	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A7R0D0	COG (EIA)	100Vdc	7.0pF±0.5pF	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A8R0D0	COG (EIA)	100Vdc	8.0pF±0.5pF	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A8R0D0 H03	COG (EIA)	100Vdc	8.0pF±0.5pF	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A9R0D0	COG (EIA)	100Vdc	9.0pF±0.5pF	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A9R0D0	COG (EIA)	100Vdc	9.0pF±0.5pF	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A100J0	COG (EIA)	100Vdc	10pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A100J0	COG (EIA)	100Vdc	10pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A120J0 H03	COG (EIA)	100Vdc	12pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A120J0	COG (EIA)	100Vdc	12pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A150J0	COG (EIA)	100Vdc	15pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A150J0 H03	COG (EIA)	100Vdc	15pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A180J0 H03	COG (EIA)	100Vdc	18pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A180J0 H03	COG (EIA)	100Vdc	18pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A220J0 H03	COG (EIA)	100Vdc	22pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A220J0	COG (EIA)	100Vdc	22pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A270J0	COG (EIA)	100Vdc	27pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A270J0	COG (EIA)	100Vdc	27pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A330J0	COG (EIA)	100Vdc	33pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A330J0 H03	COG (EIA)	100Vdc	33pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A390J0	COG (EIA)	100Vdc	39pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A390J0	COG (EIA)	100Vdc	39pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A470J0	COG (EIA)	100Vdc	47pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A470J0	COG (EIA)	100Vdc	47pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A560J0 H03	COG (EIA)	100Vdc	56pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A560J0 H03	COG (EIA)	100Vdc	56pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A680J0 H03	COG (EIA)	100Vdc	68pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A680J0 H03	COG (EIA)	100Vdc	68pF±5%	3.6×3.5	2.5	5.0	K1	M1
	COG (EIA)	100Vdc	82pF±5%	3.6×3.5	2.5	2.5	A2	DB
	COG (EIA)	100Vdc	82pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A101J0 H03 RCE5C2A101J0 H03	COG (EIA)	100Vdc 100Vdc	100pF±5%	3.6×3.5 3.6×3.5	2.5	2.5	A2	DB
RCE5C2A101J0H03	COG (EIA) COG (EIA)	100Vdc 100Vdc	100pF±5% 120pF±5%	3.6×3.5	2.5 2.5	5.0 2.5	K1 A2	M1 DB
RCE5C2A121J0H03_	COG (EIA) COG (EIA)	100Vdc 100Vdc	120pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A121J0 H03	COG (EIA)	100Vdc	150pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A151J0H03_	COG (EIA)	100Vdc	150pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A181J0 H03	COG (EIA)	100Vdc	180pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A181J0 H03	COG (EIA)	100Vdc	180pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A221J0 H03	COG (EIA)	100Vdc	220pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A221J0 H03	COG (EIA)	100Vdc	220pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A271J0 H03	COG (EIA)	100Vdc	270pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A271J0	COG (EIA)	100Vdc	270pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A331J0 H03	COG (EIA)	100Vdc	330pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A331J0 H03	COG (EIA)	100Vdc	330pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A391J0	COG (EIA)	100Vdc	390pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A391J0 H03	COG (EIA)	100Vdc	390pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A471J0 H03	COG (EIA)	100Vdc	470pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A471J0 H03	COG (EIA)	100Vdc	470pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A561J0 H03	COG (EIA)	100Vdc	560pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A561J0 H03	COG (EIA)	100Vdc	560pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A681J0 H03	COG (EIA)	100Vdc	680pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A681J0 H03	COG (EIA)	100Vdc	680pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A821J0 H03	COG (EIA)	100Vdc	820pF±5%	3.6×3.5	2.5	2.5	A2	DB

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Part Number	Temp.	Rated	Capacitance	Dimensions LxW	Dimension T	Lead Space F	Lead Style Code	Lead Style Code
	Char.	Voltage		(mm)	(mm)	(mm)	Bulk	Taping
RCE5C2A821J0 H03	COG (EIA)	100Vdc	820pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A102J0 H03	COG (EIA)	100Vdc	1000pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A102J0 H03	COG (EIA)	100Vdc	1000pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A122J0 H03	COG (EIA)	100Vdc	1200pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A122J0 H03	COG (EIA)	100Vdc	1200pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A152J0 H03	COG (EIA)	100Vdc	1500pF±5%	3.6×3.5	2.5	2.5	A2	DB
RCE5C2A152J0 H03	COG (EIA)	100Vdc	1500pF±5%	3.6×3.5	2.5	5.0	K1	M1
RCE5C2A182J1 H03	COG (EIA)	100Vdc	1800pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C2A182J1 H03	COG (EIA)	100Vdc	1800pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C2A222J1 H03	COG (EIA)	100Vdc	2200pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C2A222J1 H03	COG (EIA)	100Vdc	2200pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C2A272J1 H03	COG (EIA)	100Vdc	2700pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C2A272J1 H03	COG (EIA)	100Vdc	2700pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C2A332J1 H03	COG (EIA)	100Vdc	3300pF±5%	4.0×3.5	2.5	2.5	A2	DB
RCE5C2A332J1 H03	COG (EIA)	100Vdc	3300pF±5%	4.0×3.5	2.5	5.0	K1	M1
RCE5C2A392J2 H03	COG (EIA)	100Vdc	3900pF±5%	5.5×4.0	3.15	2.5	A2	DB
RCE5C2A392J2 H03	COG (EIA)	100Vdc	3900pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2A472J2 H03	COG (EIA)	100Vdc	4700pF±5%	5.5×4.0	3.15	2.5	A2	DB
RCE5C2A472J2 H03	COG (EIA)	100Vdc	4700pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2A562J2	COG (EIA)	100Vdc	5600pF±5%	5.5×4.0	3.15	2.5	A2	DB
RCE5C2A562J2 H03	COG (EIA)	100Vdc	5600pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2A682J2	COG (EIA)	100Vdc	6800pF±5%	5.5×4.0	3.15	2.5	A2	DB
RCE5C2A682J2	COG (EIA)	100Vdc	6800pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2A822J2 HO3	COG (EIA)	100Vdc	8200pF±5%	5.5×4.0	3.15	2.5	A2	DB
RCE5C2A822J2 HO3	COG (EIA)	100Vdc	8200pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2A103J2	COG (EIA)	100Vdc	10000pF±5%	5.5×4.0	3.15	2.5	A2	DB
RCE5C2A103J2	COG (EIA)	100Vdc	10000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E100J2	COG (EIA)	250Vdc	10pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E120J2	COG (EIA)	250Vdc	12pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E150J2	COG (EIA)	250Vdc	15pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E180J2	COG (EIA)	250Vdc	18pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E220J2	COG (EIA)	250Vdc	22pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E270J2 H03	COG (EIA)	250Vdc	27pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E330J2	COG (EIA)	250Vdc	33pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E390J2	COG (EIA)	250Vdc	39pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E470J2	COG (EIA)	250Vdc	47pF±5%	5.5×4.0	3.15	5.0	K1	M1
	COG (EIA)	250Vdc	56pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E680J2	COG (EIA)	250Vdc	68pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E820J2 H03	COG (EIA)	250Vdc	82pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E101J2	COG (EIA)	250Vdc	100pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E121J2	COG (EIA)	250Vdc	120pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E151J2	COG (EIA)	250Vdc	150pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2E181J2 H03	COG (EIA)	250Vdc	180pF±5%	5.5×4.0	3.15	5.0	K1	M1
	COG (EIA)	250Vdc	220pF±5%	5.5×4.0	3.15	5.0	K1	M1
	COG (EIA)	250Vdc	270pF±5%	5.5×4.0	3.15	5.0 E.O	K1	M1
	COG (EIA)	250Vdc	330pF±5%	5.5×4.0	3.15	5.0 E 0	K1	M1
	COG (EIA)	250Vdc	390pF±5%	5.5×4.0	3.15	5.0 E 0	K1	M1 M1
	COG (EIA)	250Vdc	470pF±5%	5.5×4.0	3.15	5.0 E 0	K1	
RCE5C2E561J2 H03	COG (EIA)	250Vdc	560pF±5%	5.5×4.0	3.15	5.0	K1	M1 M1
RCE5C2E681J2 H03	COG (EIA)	250Vdc	680pF±5%	5.5×4.0	3.15	5.0	K1	M1 M1
RCE5C2E821J2 H03	COG (EIA)	250Vdc	820pF±5%	5.5×4.0	3.15	5.0	K1	M1 M1
RCE5C2E102J2 H03	COG (EIA)	250Vdc	1000pF±5%	5.5×4.0	3.15	5.0	K1	
RCE5C2E122J2 H03 RCE5C2E152J2 H03	COG (EIA)	250Vdc 250Vdc	1200pF±5%	5.5×4.0 5.5×4.0	3.15 3.15	5.0	K1 K1	M1 M1
RCE5C2E182J2 H03	COG (EIA) COG (EIA)	250Vdc 250Vdc	1500pF±5% 1800pF±5%	5.5×4.0 5.5×4.0	3.15	5.0	KI K1	M1 M1
RCE5C2E222J2H03_	COG (EIA) COG (EIA)	250Vdc 250Vdc	2200pF±5%	5.5×4.0	3.15	5.0	K1 K1	M1 M1
	. ,	250Vdc 250Vdc				5.0		M1 M1
RCE5C2E272J2 H03	COG (EIA)	230.400	2700pF±5%	5.5×4.0	3.15	5.0	K1	1*11



Pure Number Territy. Vetage Cosperituance Operational Construction (rm) Demonstruction (rm) Lead Style (rm) RCESC23232L2 H03 COG (FIA) 250/We 3300/F=5% 55:4:0 3.15 5.0 K1 M1 RCESC23522L2 H03 COG (FIA) 250/We 4700/F3% 55:4:0 3.15 5.0 K1 M1 RCESC25822L2 H03 COG (FIA) 250/We 6900/F5% 55:4:0 3.15 5.0 K1 M1 RCESC25822L2 H03 COG (FIA) 250/We 6900/F5% 55:4:0 3.15 5.0 K1 M1 RCESC25122L2 H03 COG (FIA) 250/We 1000/F5% 55:4:0 3.15 5.0 K1 M1 RCESC2130012 H03 COG (FIA) 650/We 13/5 5.0 K1 M1 RCESC2130012 H03 COG (FIA) 650/We 13/5 5.0 K1 M1 RCESC2130012 H03 COG (FIA) 630/We 23/F15%	Continued from the preceding pa	age. 🖌							
INCESC22892121 IND31 COG (EA) 259VACE 3900pF15% 55.4.0 3.15 5.0 K1 M1 RESC2286212 IND31 COG (EA) 250VACE 5600pF15% 55.4.0 3.15 5.0 K1 M1 RESC2286212 IND31 COG (EA) 250VACE 6800pF15% 55.4.0 3.15 5.0 K1 M1 RESC2286212 IND31 COG (EA) 250VACE 6800pF15% 55.4.0 3.15 5.0 K1 M1 RESC2180312 IND31 COG (EA) 250VAE 12000pF15% 55.4.0 3.15 5.0 K1 M1 RESC218012 IND31 COG (EA) 530VAE 120F5% 55.4.0 3.15 5.0 K1 M1 RESC218012 IND31 COG (EA) 530VAE 129F5% 55.4.0 3.15 5.0 K1 M1 RESC218012 IND31 COG (EA) 530VAE 129F5% 55.4.0 3.15 5.0 K1 M1	Part Number			Capacitance	LxW	Dimension T (mm)	F		Code
Incesc2222022/12/1003 COG (EIA) 250VAc S5x40 3.15 5.0 K1 M1 Resc222682212// IM03 COG (EIA) 250VAc S600pF15% 5.5x40 3.15 5.0 K1 M1 Resc222682212// IM03 COG (EIA) 250VAc 8200pF15% 5.5x40 3.15 5.0 K1 M1 Resc222682212// IM03 COG (EIA) 250VAc 8200pF15% 5.5x40 3.15 5.0 K1 M1 Resc2218012// IM03 COG (EIA) 250VAc 12000pF15% 5.5x40 3.15 5.0 K1 M1 Resc2218012// IM03 COG (EIA) 630VAc 120pF15% 5.5x40 3.15 5.0 K1 M1 Resc2218012// IM03 COG (EIA) 630VAc 13pF15% 5.5x40 3.15 5.0 K1 M1 Resc2218012// IM03 COG (EIA) 630VAc 22pF15% 5.5x40 3.15 5.0 K1 M1 Resc2218012// IM03 COG (EIA) 630VAc 22pF15% 5.5x40	RCE5C2E332J2	COG (EIA)	250Vdc	3300pF±5%				К1	
Image: Sec: 22:02:00:00 COG (EIA) 250:00:0 55:40 3.15 5.0 K1 M1 RESC2E86212:00:00:00 COG (EIA) 250:00:0 6800pr:5% 55:40 3.15 5.0 K1 M1 RESC2E8212:00:00:00 COG (EIA) 250:00:0 55:40 3.15 5.0 K1 M1 RESC2E8212:00:00:0 COG (EIA) 250:00:0 150:00:0:0:0:0:0:0:0:0:0:0:0:0:0:0:0:0:0	RCE5C2E392J2 H03	COG (EIA)	250Vdc	3900pF±5%	5.5×4.0	3.15	5.0	K1	M1
Incesc226682220 Ind Stowle 6800p195% Sts.40 3.15 S.0 K1 M1 RCESC2E02212 IND3 COG (EM) 250vide 12000p155% Sts.40 3.15 S.0 K1 M1 RCESC2E10312 IND3 COG (EM) 250vide 12000p155% Sts.40 3.15 S.0 K1 M1 RCESC2E13312 IND3 COG (EM) 250vide 12000p155% Sts.40 3.15 S.0 K1 M1 RCESC2E13012 IND3 COG (EM) 530vide 120p15% Sts.40 3.15 S.0 K1 M1 RCESC2130012 IND3 COG (EM) 630vide 12p15% Sts.40 3.15 S.0 K1 M1 RCESC2130012 IND3 COG (EM) 630vide 22p15% Sts.40 3.15 S.0 K1 M1 RCESC2130012 IND3 COG (EM) 630vide 23p15% Sts.40 3.15 S.0 K1 M1 RCESC213	RCE5C2E472J2 H03	COG (EIA)	250Vdc	4700pF±5%	5.5×4.0	3.15	5.0	K1	M1
Intersc2ele2212 Intersc2ele2212 Intersc2ele2212 Intersc2ele2212 Intersc2ele2122 Intersc2ele212 Intersc2ele222 Intersc2ele222	RCE5C2E562J2 H03	COG (EIA)	250Vdc	5600pF±5%	5.5×4.0	3.15	5.0	K1	M1
Resc2e10312 COG (EIA) 250 V/c 10000pF:5% 55-4.0 3.15 5.0 K1 M1 Resc2e12312 COG (EIA) 250 V/c 12000PF:5% 55-4.0 3.15 5.0 K1 M1 Resc2e12012 COG (EIA) 550 V/c 1000PF:5% 55-4.0 3.15 5.0 K1 M1 Resc221502 COG (EIA) 630 V/c 129FF:5% 55-4.0 3.15 5.0 K1 M1 Resc221602 COG (EIA) 630 V/c 129FF:5% 55-4.0 3.15 5.0 K1 M1 Resc221702 COG (EIA) 630 V/c 229FF:5% 55-4.0 3.15 5.0 K1 M1 Resc221702 COG (EIA) 630 V/c 339FF:5% 55-4.0 3.15 5.0 K1 M1 Resc224502 COG (EIA) 630 V/c 339FF:5% 55-4.0 3.15 5.0 K1 M1 Resc224502 COG (EIA) 630 V/c 639FF:5% 55-4.0 3.15 5.0 <th>RCE5C2E682J2 H03</th> <th>COG (EIA)</th> <th>250Vdc</th> <th>6800pF±5%</th> <th>5.5×4.0</th> <th>3.15</th> <th>5.0</th> <th>K1</th> <th>M1</th>	RCE5C2E682J2 H03	COG (EIA)	250Vdc	6800pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCESC2E123J2 HO3 COG (EIA) 250V/dt 12000pF:5% 55:40 3.15 5.0 K1 M1 RCESC2100J2 LHO3 COG (EIA) 250V/dt 12000pF:5% 55:40 3.15 5.0 K1 M1 RCESC2100J2 LHO3 COG (EIA) 630V/dt 12pF:5% 55:40 3.15 5.0 K1 M1 RCESC2120J2 LHO3 COG (EIA) 630V/dt 12pF:5% 55:40 3.15 5.0 K1 M1 RCESC2120J2 LHO3 COG (EIA) 630V/dt 22pF:5% 55:40 3.15 5.0 K1 M1 RCESC2130J2 LHO3 COG (EIA) 630V/dt 3pF:5% 55:40 3.15 5.0 K1 M1 RCESC2130J2 LHO3 COG (EIA) 630V/dt 3pF:5% 55:40 3.15 5.0 K1 M1 RCESC2130J2 LHO3 COG (EIA) 630V/dt 6pF:5% 55:40 3.15 5.0 K1 M1	RCE5C2E822J2 H03	COG (EIA)	250Vdc	8200pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCESC2E153J2 HO3 COG (ELA) 250Vdc 15000pF+5% 55+4.0 3.15 5.0 K1 M1 RCESC2J100J2 [H03] COG (ELA) 630Vdc 12pF+5% 55+4.0 3.15 5.0 K1 M1 RCESC2J100J2 [H03] COG (ELA) 630Vdc 12pF+5% 55+4.0 3.15 5.0 K1 M1 RCESC2J20J2 [H03] COG (ELA) 630Vdc 22pF+5% 55+4.0 3.15 5.0 K1 M1 RCESC2J20J2 [H03] COG (ELA) 630Vdc 22pF+5% 55+4.0 3.15 5.0 K1 M1 RCESC2J20J2 [H03] COG (ELA) 630Vdc 3pF+5% 55+4.0 3.15 5.0 K1 M1 RCESC2J20J2 [H03] COG (ELA) 630Vdc 6pF+5% 55+4.0 3.15 5.0 K1 M1 RCESC2J20J2 [H03] COG (ELA) 630Vdc 6pF+5% 55+4.0 3.15 5.0 K1 M1	RCE5C2E103J2 H03	COG (EIA)	250Vdc	10000pF±5%	5.5×4.0	3.15	5.0	K1	M1
REESC2J100J2H03_ COG (EIA) 630Vdc 10pF:5% 55-4.0 3.15 5.0 K1 M1 REESC2J10J2H03_ COG (EIA) 630Vdc 12pF:5% 55-4.0 3.15 5.0 K1 M1 REESC2J10J2H03_ COG (EIA) 630Vdc 12pF:5% 55-4.0 3.15 5.0 K1 M1 REESC2J30J2H03_ COG (EIA) 630Vdc 22pF:5% 55-4.0 3.15 5.0 K1 M1 REESC2J30J2H03_ COG (EIA) 630Vdc 32pF:5% 55-4.0 3.15 5.0 K1 M1 REESC2J40J2H03_ COG (EIA) 630Vdc 32pF:5% 55-4.0 3.15 5.0 K1 M1 REESC2J40J2H03_ COG (EIA) 630Vdc 63pF:5% 55-4.0 3.15 5.0 K1 M1 REESC2J10J2H03_ COG (EIA) 630Vdc 82pF:5% 55-4.0 3.15 5.0 K1 M1 REESC2J10J2H03_ COG (EIA) 630Vdc 12pF:5% 55-4.0	RCE5C2E123J2 H03	COG (EIA)	250Vdc	12000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCESC2JI2012 H03 COG (EIA) 630/dc 12pF±5% 5.5-4.0 3.15 5.0 K1 M1 RCESC2JIS012 H03 COG (EIA) 630/dc 13pF±5% 55-4.0 3.15 5.0 K1 M1 RCESC2J2012 H03 COG (EIA) 630/dc 22pF±5% 55-4.0 3.15 5.0 K1 M1 RCESC2J2012 H03 COG (EIA) 630/dc 22pF±5% 55-4.0 3.15 5.0 K1 M1 RCESC2J30012 H03 COG (EIA) 630/dc 33pF±5% 55-4.0 3.15 5.0 K1 M1 RCESC2J30012 H03 COG (EIA) 630/dc 42pF±5% 55-4.0 3.15 5.0 K1 M1 RCESC2J3012 H03 COG (EIA) 630/dc 82pF±5% 55-4.0 3.15 5.0 K1 M1 RCESC2J1012 H03 COG (EIA) 630/dc 120pF±5% 55-4.0 3.15 5.0 K1 M1 R	RCE5C2E153J2 H03	COG (EIA)	250Vdc	15000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCESC2J150J2 H03 COG (EIA) 630Vdc 15pF15% 55-4.0 3.15 5.0 K1 M1 RCESC2J20J2 H03 COG (EIA) 630Vdc 22pF15% 55-4.0 3.15 5.0 K1 M1 RCESC2J20J2 H03 COG (EIA) 630Vdc 22pF15% 55-4.0 3.15 5.0 K1 M1 RCESC2J30J2 H03 COG (EIA) 630Vdc 33pF15% 55-4.0 3.15 5.0 K1 M1 RCESC2J30J2 H03 COG (EIA) 630Vdc 55pF15% 55-4.0 3.15 5.0 K1 M1 RCESC2J60J2 H03 COG (EIA) 630Vdc 62pF15% 55-4.0 3.15 5.0 K1 M1 RCESC2J10J2 H03 COG (EIA) 630Vdc 120pF15% 55-4.0 3.15 5.0 K1 M1 RCESC2J10J2 H03 COG (EIA) 630Vdc 120pF15% 55-4.0 3.15 5.0 K1 M1 RCES	RCE5C2J100J2 H03	COG (EIA)	630Vdc	10pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCESC2118012 H03 COG (EIA) 630Vdc 18pF+5% 55+4.0 3.15 5.0 K1 M1 RCESC212012 H03 COG (EIA) 630Vdc 27pF+5% 55+4.0 3.15 5.0 K1 M1 RCESC212012 H03 COG (EIA) 630Vdc 33pF+5% 55+4.0 3.15 5.0 K1 M1 RCESC2130012 H03 COG (EIA) 630Vdc 3pF+5% 55+4.0 3.15 5.0 K1 M1 RCESC216002 COG (EIA) 630Vdc 63pF+5% 55+4.0 3.15 5.0 K1 M1 RCESC216012 H03 COG (EIA) 630Vdc 120pF+5% 55+4.0 3.15 5.0 K1 M1 RCESC211812 H03 COG (EIA) 630Vdc 120pF+5% 55+4.0 3.15 5.0 K1 M1 RCESC211812 H03 COG (EIA) 630Vdc 120pF+5% 55+4.0 3.15 5.0 K1 M1 RCESC211812	RCE5C2J120J2 H03	COG (EIA)	630Vdc	12pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCESC2J220J2 H03 COG (EIA) 630Vdc 22pF±5% 5.5-4.0 3.15 5.0 K1 M1 RCESC2J30J2 COG (EIA) 630Vdc 32pF:5% 55-4.0 3.15 5.0 K1 M1 RCESC2J30J2 H03 COG (EIA) 630Vdc 32pF:5% 55-4.0 3.15 5.0 K1 M1 RCESC2J60J2 H03 COG (EIA) 630Vdc 47pF:5% 55-4.0 3.15 5.0 K1 M1 RCESC2J60J2 H03 COG (EIA) 630Vdc 82pF:5% 55-4.0 3.15 5.0 K1 M1 RCESC2J60J2 H03 COG (EIA) 630Vdc 120pF:5% 55-4.0 3.15 5.0 K1 M1 RCESC2J10J2 H03 COG (EIA) 630Vdc 120pF:5% 55-4.0 3.15 5.0 K1 M1 RCESC2J10J2 H03 COG (EIA) 630Vdc 220pF:5% 55-4.0 3.15 5.0 K1 M1 RCESC2J312/2	RCE5C2J150J2 H03	COG (EIA)	630Vdc	15pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCESC2J270J2 H03 COG (EIA) 630Vdc 27PF15% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J30J2 H03 COG (EIA) 630Vdc 33pF2% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J30J2 H03 COG (EIA) 630Vdc 47Pf2% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J60J2 H03 COG (EIA) 630Vdc 68Pf2% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J60J2 H03 COG (EIA) 630Vdc 82pF2% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J101J2 H03 COG (EIA) 630Vdc 120pF15% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J101J2 H03 COG (EIA) 630Vdc 120pF15% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J31J12 H03 COG (EIA) 630Vdc 220pF15% 5.5×4.0 3.15 5.0 K1 M1	RCE5C2J180J2 H03	COG (EIA)	630Vdc	18pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCESC2J330J2 H03 COG (EIA) 630Vdc 33pF:5% 5.5+4.0 3.15 5.0 K1 M1 RCESC2J700J2 H03 COG (EIA) 630Vdc 3pF:5% 5.5+4.0 3.15 5.0 K1 M1 RCESC2J7012 H03 COG (EIA) 630Vdc 567:5% 5.5+4.0 3.15 5.0 K1 M1 RCESC2J2012 H03 COG (EIA) 630Vdc 82pF:5% 5.5+4.0 3.15 5.0 K1 M1 RCESC2J30122 H03 COG (EIA) 630Vdc 120pF:5% 5.5+4.0 3.15 5.0 K1 M1 RCESC2J15122 H03 COG (EIA) 630Vdc 120pF:5% 5.5+4.0 3.15 5.0 K1 M1 RCESC2J31212 H03 COG (EIA) 630Vdc 220pF:5% 5.5+4.0 3.15 5.0 K1 M1 RCESC2J31212 H03 COG (EIA) 630Vdc 220pF:5% 5.5+4.0 3.15 5.0 K1 M1	RCE5C2J220J2 H03	COG (EIA)	630Vdc	22pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCESC2J390J2 H03 COG (EIA) 630Vdc 37pF15% 5.5×4.0 3.15 S.0 K1 M1 RCESC2J60J2 H03 COG (EIA) 630Vdc 47pF15% 5.5×4.0 3.15 S.0 K1 M1 RCESC2J60J2 H03 COG (EIA) 630Vdc 68pF15% S.5×4.0 3.15 S.0 K1 M1 RCESC2J012 H03 COG (EIA) 630Vdc 120pF15% S.5×4.0 3.15 S.0 K1 M1 RCESC2J1212 H03 COG (EIA) 630Vdc 120pF15% S.5×4.0 3.15 S.0 K1 M1 RCESC2J151J2 H03 COG (EIA) 630Vdc 120pF15% S.5×4.0 3.15 S.0 K1 M1 RCESC2J31J2 H03 COG (EIA) 630Vdc 220pF15% S.5×4.0 3.15 S.0 K1 M1 RCESC2J31J2 H03 COG (EIA) 630Vdc 230pF15% S.5×4.0 3.15 S.0 K1 M1	RCE5C2J270J2 H03	COG (EIA)	630Vdc	27pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCESC2J470J2 H03 COG (EIA) 630Vdc 47pF15% 5.5+4.0 3.15 5.0 K1 M1 RCESC2CS0J2 H03 COG (EIA) 630Vdc 65pF15% 5.5+4.0 3.15 5.0 K1 M1 RCESC2CS0J2 H03 COG (EIA) 630Vdc 82pF15% 5.5+4.0 3.15 5.0 K1 M1 RCESC2DIJ2 H03 COG (EIA) 630Vdc 100pF15% 5.5+4.0 3.15 5.0 K1 M1 RCESC2DIJ2 H03 COG (EIA) 630Vdc 120pF15% 5.5+4.0 3.15 5.0 K1 M1 RCESC2DIJ2 H03 COG (EIA) 630Vdc 120pF15% 5.5+4.0 3.15 5.0 K1 M1 RCESC2J312 H03 COG (EIA) 630Vdc 270pF15% 5.5+4.0 3.15 5.0 K1 M1 RCESC2J312 H03 COG (EIA) 630Vdc 270pF15% 5.5+4.0 3.15 5.0 K1 M1 <t< th=""><th>RCE5C2J330J2 H03</th><th>COG (EIA)</th><th>630Vdc</th><th>33pF±5%</th><th>5.5×4.0</th><th>3.15</th><th>5.0</th><th>K1</th><th>M1</th></t<>	RCE5C2J330J2 H03	COG (EIA)	630Vdc	33pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCESC2J560J2_H03 COG (EIA) 630Vdc 56pF±5% 5.5+4.0 3.15 5.0 K1 M1 RCESC2L680J2_H03 COG (EIA) 630Vdc 62pF±5% 5.5+4.0 3.15 5.0 K1 M1 RCESC2L80J2_H03 COG (EIA) 630Vdc 120pF±5% 5.5+4.0 3.15 5.0 K1 M1 RCESC2L3D1J2_H03 COG (EIA) 630Vdc 120pF±5% 5.5+4.0 3.15 5.0 K1 M1 RCESC2J121_10 COG (CIA) 630Vdc 120pF±5% 5.5+4.0 3.15 5.0 K1 M1 RCESC2J2121_2 H03 COG (EIA) 630Vdc 120pF±5% 5.5+4.0 3.15 5.0 K1 M1 RCESC2J3112_H03 COG (EIA) 630Vdc 270pF±5% 5.5+4.0 3.15 5.0 K1 M1 RCESC2J471J2_H03 COG (EIA) 630Vdc 30pF±5% 5.5+4.0 3.15 5.0 K1 M1 RCESC2J471J2_H03 COG (EIA) 630Vdc 620pF±5% <t< th=""><th>RCE5C2J390J2</th><th>COG (EIA)</th><th>630Vdc</th><th>39pF±5%</th><th>5.5×4.0</th><th>3.15</th><th>5.0</th><th>K1</th><th>M1</th></t<>	RCE5C2J390J2	COG (EIA)	630Vdc	39pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCESC2J680J2 HO3 COG (EIA) 630Vdc 68pF15% 5.5-4.0 3.15 5.0 K1 M1 RCESC2JB20 COG (EIA) 630Vdc 82pF15% 5.5-4.0 3.15 5.0 K1 M1 RCESC2JD12 HO3 COG (EIA) 630Vdc 120pF15% 5.5-4.0 3.15 5.0 K1 M1 RCESC2JD12 HO3 COG (EIA) 630Vdc 120pF15% 5.5-4.0 3.15 5.0 K1 M1 RCESC2JD12 HO3 COG (EIA) 630Vdc 120pF15% 5.5-4.0 3.15 5.0 K1 M1 RCESC2JD112 HO3 COG (EIA) 630Vdc 220pF15% 5.5-4.0 3.15 5.0 K1 M1 RCESC2JD112 HO3 COG (EIA) 630Vdc 270pF15% 5.5-4.0 3.15 5.0 K1 M1 RCESC2JD12 HO3 COG (EIA) 630Vdc 630Vdc 55.4.0 3.15 5.0 K1 M1 RCESC2JD2	RCE5C2J470J2	COG (EIA)	630Vdc	47pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCESC2J820J2 H03 COG (EIA) 630Vdc 82pf+5% 5.5+4.0 3.15 5.0 K1 M1 RCESC2J10J2 H03 COG (EIA) 630Vdc 120pf+5% 5.5+4.0 3.15 5.0 K1 M1 RCESC2J12J2 H03 COG (EIA) 630Vdc 120pf+5% 5.5+4.0 3.15 5.0 K1 M1 RCESC2J22J2 H03 COG (EIA) 630Vdc 220pf+5% 5.5+4.0 3.15 5.0 K1 M1 RCESC2J22J2 H03 COG (EIA) 630Vdc 220pf+5% 5.5+4.0 3.15 5.0 K1 M1 RCESC2J31J2 H03 COG (EIA) 630Vdc 390pf+5% 5.5+4.0 3.15 5.0 K1 M1 RCESC2J31J2 H03 COG (EIA) 630Vdc 690pf+5% 5.5+4.0 3.15 5.0 K1 M1 RCESC2J3J2J2 H03 COG (EIA) 630Vdc 1000pf+5% 5.5+4.0 3.15 5.0 K1 M1	RCE5C2J560J2 H03	COG (EIA)	630Vdc	56pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCESC2JI01J2 H03 COG (EIA) 630Vdc 100pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2JI51J2 H03 COG (EIA) 630Vdc 120pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2JI51J2 H03 COG (EIA) 630Vdc 180pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2JI31J2 H03 COG (EIA) 630Vdc 220pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J31J2 H03 COG (EIA) 630Vdc 230pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J31J2 H03 COG (EIA) 630Vdc 430Pf±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J31J2 H03 COG (EIA) 630Vdc 630Pf±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J31J2 H03 COG (EIA) 630Vdc 120pF±5% 5.5×4.0 3.15 5.0 K1 M1	RCE5C2J680J2 H03	COG (EIA)	630Vdc	68pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCESC2JI21J2 H03 COG (EIA) 630Vdc 120F±5% 5.5+4.0 3.15 5.0 K1 M1 RCESC2JIS1J2 H03 COG (EIA) 630Vdc 180P±5% 5.5+4.0 3.15 5.0 K1 M1 RCESC2JIS1J2 H03 COG (EIA) 630Vdc 120P±5% 5.5+4.0 3.15 5.0 K1 M1 RCESC2JZIJ2 H03 COG (EIA) 630Vdc 220P±5% 5.5+4.0 3.15 5.0 K1 M1 RCESC2J3JJ2 H03 COG (EIA) 630Vdc 230P±5% 5.5+4.0 3.15 5.0 K1 M1 RCESC2J3JJ2 H03 COG (EIA) 630Vdc 630P±5% 5.5+4.0 3.15 5.0 K1 M1 RCESC2J8JJ2 H03 COG (EIA) 630Vdc 630P±5% 5.5+4.0 3.15 5.0 K1 M1 RCESC2J8JJ2 H03 COG (EIA) 630Vdc 120P±5% 5.5+4.0 3.15 5.0 K1 M1	RCE5C2J820J2 H03	COG (EIA)	630Vdc	82pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCESC2J151J2 HO3 COG (EIA) 630Vdc 150pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J121H03 COG (EIA) 630Vdc 220pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J2121D2 HO3 COG (EIA) 630Vdc 220pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J31J2 HO3 COG (EIA) 630Vdc 320pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J4712 HO3 COG (EIA) 630Vdc 470P±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J4712 HO3 COG (EIA) 630Vdc 50PF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J8612 HO3 COG (EIA) 630Vdc 820P±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J8212 HO3 COG (EIA) 630Vdc 1200P±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J321	RCE5C2J101J2 H03	COG (EIA)	630Vdc	100pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCESC2J181J2 H03 COG (EIA) 630Vdc 180pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESCJ22112 H03 COG (EIA) 630Vdc 220pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESCJ3112 H03 COG (EIA) 630Vdc 320pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESCJ3112 H03 COG (EIA) 630Vdc 330pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESCJ36112 H03 COG (EIA) 630Vdc 560P±5% 5.5×4.0 3.15 5.0 K1 M1 RCESCJ36112 H03 COG (EIA) 630Vdc 680P±5% 5.5×4.0 3.15 5.0 K1 M1 RCESCJ31212 H03 COG (EIA) 630Vdc 1200P±5% 5.5×4.0 3.15 5.0 K1 M1 RCESCJ31212 H03 COG (EIA) 630Vdc 1200P±5% 5.5×4.0 3.15 5.0 K1 M1	RCE5C2J121J2 H03	COG (EIA)	630Vdc	120pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCESC2J221J2 H03 COG (EIA) 630Vdc 220pf±5% 5.5+4.0 3.15 5.0 K1 M1 RCESC2J71J2 H03 COG (EIA) 630Vdc 270pf±5% 5.5+4.0 3.15 5.0 K1 M1 RCESCJ391J2 H03 COG (EIA) 630Vdc 330pf±5% 5.5+4.0 3.15 5.0 K1 M1 RCESCJ391J2 H03 COG (EIA) 630Vdc 470pf±5% 5.5+4.0 3.15 5.0 K1 M1 RCESCJ681J2 H03 COG (EIA) 630Vdc 820pf±5% 5.5+4.0 3.15 5.0 K1 M1 RCESCJ82J21 H03 COG (EIA) 630Vdc 820pf±5% 5.5+4.0 3.15 5.0 K1 M1 RCESCJ122J2 H03 COG (EIA) 630Vdc 1200pf±5% 5.5+4.0 3.15 5.0 K1 M1 RCESCJ12J2J2 H03 COG (EIA) 630Vdc 1200pf±5% 5.5+4.0 3.15 5.0 K1 M1	RCE5C2J151J2 H03	COG (EIA)	630Vdc	150pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCESC2J271J2 HO3 COG (EIA) 630Vdc 270pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J331J2 HO3 COG (EIA) 630Vdc 330pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J31J2 HO3 COG (EIA) 630Vdc 390pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J31J2 HO3 COG (EIA) 630Vdc 560Pf±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J681J2 HO3 COG (EIA) 630Vdc 820pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J2J22 HO3 COG (EIA) 630Vdc 1200pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J32J2 HO3 COG (EIA) 630Vdc 1200pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J32J22 HO3 COG (EIA) 630Vdc 2200pF±5% 5.5×4.0 3.15 5.0 K1 M1 <	RCE5C2J181J2 H03	COG (EIA)	630Vdc	180pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCESC2J331J2 H03 COG (EIA) 630Vdc 330pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J391J2 H03 COG (EIA) 630Vdc 330pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J471J2 H03 COG (EIA) 630Vdc 470pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J661J2 H03 COG (EIA) 630Vdc 680pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J62J2 H03 COG (EIA) 630Vdc 820pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J12J2 H03 COG (EIA) 630Vdc 1200pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J152J2 H03 COG (EIA) 630Vdc 1800PF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J152J2 H03 COG (EIA) 630Vdc 2300PF±5% 5.5×4.0 3.15 5.0 K1 M1	RCE5C2J221J2 H03	COG (EIA)	630Vdc	220pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCESC2J391J2_H03 COG (EIA) 630Vdc 390pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J61J2_H03 COG (EIA) 630Vdc 470pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J681J2_H03 COG (EIA) 630Vdc 680pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J821J2_H03 COG (EIA) 630Vdc 820pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J821J2_H03 COG (EIA) 630Vdc 1200pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J122J2_H03 COG (EIA) 630Vdc 1200pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J122J2_H03 COG (EIA) 630Vdc 1200pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J22J2_H03 COG (EIA) 630Vdc 2200pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J32J2_H03 COG (EIA) 630Vdc 2300Pf±5% 5.5×4.	RCE5C2J271J2 H03	COG (EIA)	630Vdc	270pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J471J2 H03 COG (EIA) 630Vdc 470pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J65J2 H03 COG (EIA) 630Vdc 560pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J63J2 H03 COG (EIA) 630Vdc 820pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J02J2 H03 COG (EIA) 630Vdc 820pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J102J2 H03 COG (EIA) 630Vdc 1200pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J12J2 H03 COG (EIA) 630Vdc 1200pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J2ZJ2 H03 COG (EIA) 630Vdc 1200F±5% 5.5×4.0 3.15 5.0 K1 M1 RCESC2J2ZJ2 H03 COG (EIA) 630Vdc 2200F±5% 5.5×4.0 3.15 5.0 K1 M1	RCE5C2J331J2 H03	COG (EIA)	630Vdc	330pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J561J2 H03 COG (EIA) 630Vdc 560pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCE5C2J681J2 H03 COG (EIA) 630Vdc 680pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCE5C2J821J2 H03 COG (EIA) 630Vdc 820pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCE5C2J122J2 H03 COG (EIA) 630Vdc 1200pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCE5C2J122J2 H03 COG (EIA) 630Vdc 1200pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCE5C2J122J2 H03 COG (EIA) 630Vdc 1200pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCE5C2J32J2 H03 COG (EIA) 630Vdc 2700pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCE5C3J32J2 H03 COG (EIA) 1000Vdc 12pF±5% 5.5×4.0 3.15 5.0 K1 M1	RCE5C2J391J2 H03	COG (EIA)	630Vdc	390pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C2J681J2 H03 COG (EIA) 630Vdc 680pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCE5C2J821J2 H03 COG (EIA) 630Vdc 820pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCE5C2J122J2 H03 COG (EIA) 630Vdc 1200pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCE5C2J122J2 H03 COG (EIA) 630Vdc 1500pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCE5C2J182J2 H03 COG (EIA) 630Vdc 1500pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCE5C2J182J2 H03 COG (EIA) 630Vdc 2200pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCE5C2J32J2 H03 COG (EIA) 630Vdc 2300pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCE5C3A120J2 H03 COG (EIA) 1000Vdc 12pF±5% 5.5×4.0 3.15 5.0 K1 M1	RCE5C2J471J2 H03	COG (EIA)		470pF±5%		3.15			M1
RCE5C2J321J2_H03 COG (EIA) 630Vdc 820pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCE5C2J102J2_H03 COG (EIA) 630Vdc 1000pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCE5C2J122J2_H03 COG (EIA) 630Vdc 1200pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCE5C2J122J2_H03 COG (EIA) 630Vdc 1200pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCE5C2J22J2_H03 COG (EIA) 630Vdc 2200pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCE5C2J322J2_H03 COG (EIA) 630Vdc 2200pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCE5C2J322J2_H03 COG (EIA) 630Vdc 2200pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCE5C3A100J2_H03 COG (EIA) 1000Vdc 10pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCE5C3A120J2_H03 COG (EIA) 1000Vdc 12pF±5% 5.5	RCE5C2J561J2 H03	COG (EIA)							
RCE5C2JJ02J2 H03 COG (EIA) 630Vdc 1000pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCE5C2JJ22J2 H03 COG (EIA) 630Vdc 1200pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCE5C2JJ22J2 H03 COG (EIA) 630Vdc 1500pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCE5C2JJ22J2 H03 COG (EIA) 630Vdc 2200pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCE5C2JJ22J2 H03 COG (EIA) 630Vdc 2200pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCE5C2JJ32J2 H03 COG (EIA) 630Vdc 2200pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCE5C3J32J2 H03 COG (EIA) 100Vdc 10pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCE5C3A120J2 H03 COG (EIA) 100Vdc 12pF±5% 5.5×4.0 3.15 5.0 K1 M1		. ,							
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RCE5C3A151J2 HO3 COG (EIA) 1000Vdc 150pF±5% 5.5×4.0 3.15 5.0 K1 M1 RCE5C3A181J2 HO3 COG (EIA) 1000Vdc 180pF±5% 5.5×4.0 3.15 5.0 K1 M1	RCE5C3A101J2 H03	COG (EIA)	1000Vdc	100pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A181J2 HO3 COG (EIA) 1000Vdc 180pF±5% 5.5×4.0 3.15 5.0 K1 M1	RCE5C3A121J2 H03	COG (EIA)	1000Vdc	120pF±5%	5.5×4.0	3.15	5.0	K1	M1
	RCE5C3A151J2 H03	COG (EIA)	1000Vdc	150pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A221J2 HO3 COG (EIA) 1000Vdc 220pF±5% 5.5×4.0 3.15 5.0 K1 M1	RCE5C3A181J2 H03	COG (EIA)	1000Vdc	180pF±5%	5.5×4.0	3.15	5.0	K1	M1
	RCE5C3A221J2 H03	COG (EIA)	1000Vdc	220pF±5%	5.5×4.0	3.15	5.0	K1	M1

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RCE5C3A271J2	COG (EIA)	1000Vdc	270pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A331J2	COG (EIA)	1000Vdc	330pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A391J2	COG (EIA)	1000Vdc	390pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A471J2 H03	COG (EIA)	1000Vdc	470pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A561J2 H03	COG (EIA)	1000Vdc	560pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A681J2	COG (EIA)	1000Vdc	680pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A821J2	COG (EIA)	1000Vdc	820pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE5C3A102J2	COG (EIA)	1000Vdc	1000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2E101J1	U2J (EIA)	250Vdc	100pF±5%	4.0×3.5	3.15	5.0	K1	M1
RCE7U2E151J1 H03	U2J (EIA)	250Vdc	150pF±5%	4.0×3.5	3.15	5.0	K1	M1
RCE7U2E221J1 H03	U2J (EIA)	250Vdc	220pF±5%	4.0×3.5	3.15	5.0	K1	M1
RCE7U2E331J1 H03	U2J (EIA)	250Vdc	330pF±5%	4.0×3.5	3.15	5.0	K1	M1
RCE7U2E471J1 H03	U2J (EIA)	250Vdc	470pF±5%	4.0×3.5	3.15	5.0	K1	M1
RCE7U2E681J1 H03	U2J (EIA)	250Vdc	680pF±5%	4.0×3.5	3.15	5.0	K1	M1
RCE7U2E102J1	U2J (EIA)	250Vdc	1000pF±5%	4.0×3.5	3.15	5.0	K1	M1
RCE7U2E152J1 H03	U2J (EIA)	250Vdc	1500pF±5%	4.0×3.5	3.15	5.0	K1	M1
RCE7U2E222J1 H03	U2J (EIA)	250Vdc	2200pF±5%	4.0×3.5	3.15	5.0	K1	M1
RCE7U2E332J1 H03	U2J (EIA)	250Vdc	3300pF±5%	4.0×3.5	3.15	5.0	K1	M1
RCE7U2E472J1 H03	U2J (EIA)	250Vdc	4700pF±5%	4.0×3.5	3.15	5.0	K1	M1
RCE7U2E682J2 H03	U2J (EIA)	250Vdc	6800pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2E103J2 H03	U2J (EIA)	250Vdc	10000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J100J2 H03	U2J (EIA)	630Vdc	10pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J150J2 H03	U2J (EIA)	630Vdc	15pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J220J2 H03	U2J (EIA)	630Vdc	22pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J330J2 H03	U2J (EIA)	630Vdc	33pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J470J2 H03	U2J (EIA)	630Vdc	47pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J680J2 H03	U2J (EIA)	630Vdc	68pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J101J2 H03	U2J (EIA)	630Vdc	100pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J151J2 H03	U2J (EIA)	630Vdc	150pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J221J2 H03	U2J (EIA)	630Vdc	220pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J331J2 H03	U2J (EIA)	630Vdc	330pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J471J2 H03	U2J (EIA)	630Vdc	470pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J681J2 H03	U2J (EIA)	630Vdc	680pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J102J2 H03	U2J (EIA)	630Vdc	1000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J152J2 H03	U2J (EIA)	630Vdc	1500pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J222J2 H03	U2J (EIA)	630Vdc	2200pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J332J2 H03	U2J (EIA)	630Vdc	3300pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J472J2 H03	U2J (EIA)	630Vdc	4700pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U2J682J3 H03	U2J (EIA)	630Vdc	6800pF±5%	5.5×5.0	4.0	5.0	K1	M1
RCE7U2J103J3 H03	U2J (EIA)	630Vdc	10000pF±5%	5.5×5.0	4.0	5.0	K1	M1
RCE7U2J153J4 H03	U2J (EIA)	630Vdc	15000pF±5%	7.5×5.5	4.0	5.0	K1	M1
RCE7U2J223J4 H03	U2J (EIA)	630Vdc	22000pF±5%	7.5×5.5	4.0	5.0	K1	M1
RCE7U2J333J5	U2J (EIA)	630Vdc	33000pF±5%	7.5×8.0	4.0	5.0	B1	E1
RCE7U2J473J5	U2J (EIA)	630Vdc	47000pF±5%	7.5×8.0	4.0	5.0	B1	E1
RCE7U2J943JU H03	U2J (EIA)	630Vdc	94000pF±5%	7.7×13.0	4.0	5.0	B1	E1
RCE7U3A100J2	U2J (EIA)	1000Vdc	10pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U3A150J2	U2J (EIA)	1000Vdc	15pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U3A220J2 H03	U2J (EIA)	1000Vdc	22pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U3A330J2 H03	U2J (EIA)	1000Vdc	33pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U3A470J2 H03	U2J (EIA)	1000Vdc	47pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U3A680J2 H03	U2J (EIA)	1000Vdc	68pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U3A101J2	U2J (EIA)	1000Vdc	100pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U3A151J2	U2J (EIA)	1000Vdc	150pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U3A221J2 H03	U2J (EIA)	1000Vdc	220pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U3A331J2 H03	U2J (EIA)	1000Vdc	330pF±5%	5.5×4.0	3.15	5.0	K1	M1
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RCE7U3A471J2	U2J (EIA)	1000Vdc	470pF±5%	5.5×4.0	3.15	5.0	K1	M1

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RCE7U3A102J2	U2J (EIA)	1000Vdc	1000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RCE7U3A152J3 H03	U2J (EIA)	1000Vdc	1500pF±5%	5.5×5.0	4.0	5.0	K1	M1
RCE7U3A222J3 H03	U2J (EIA)	1000Vdc	2200pF±5%	5.5×5.0	4.0	5.0	K1	M1
RCE7U3A332J4 H03	U2J (EIA)	1000Vdc	3300pF±5%	7.5×5.5	4.0	5.0	K1	M1
RCE7U3A472J4 H03	U2J (EIA)	1000Vdc	4700pF±5%	7.5×5.5	4.0	5.0	K1	M1
RCE7U3A682J5	U2J (EIA)	1000Vdc	6800pF±5%	7.5×8.0	4.0	5.0	B1	E1
RCE7U3A103J5	U2J (EIA)	1000Vdc	10000pF±5%	7.5×8.0	4.0	5.0	B1	E1
RCE7U3A203JU H03	U2J (EIA)	1000Vdc	20000pF±5%	7.7×13.0	4.0	5.0	B1	E1

Two blank columns are filled with the lead style code. Please refer to the 3 columns on the right for the appropriate code.

The last blank column is filled with the packaging code. (B: bulk, A: ammo pack)

High Dielectric Constant Type, X7R/X7S Characteristics

	Temp.	Rated		Dimensions	Dimension	Lead Space	Lead Style	Lead Style
Part Number	Char.	Voltage	Capacitance	LxW (mm)	l (mm)	F (mm)	Code Bulk	Code Taping
RCER71E104K0 H03	X7R (EIA)	25Vdc	0.1µF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71E104K0 H03	X7R (EIA)	25Vdc	0.1µF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71E154K0 H03	X7R (EIA)	25Vdc	0.15µF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71E154K0 H03	X7R (EIA)	25Vdc	0.15µF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71E224K0 H03	X7R (EIA)	25Vdc	0.22µF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71E224K0 H03	X7R (EIA)	25Vdc	0.22µF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71E334K1 H03	X7R (EIA)	25Vdc	0.33µF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER71E334K1 H03	X7R (EIA)	25Vdc	0.33µF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER71E474K1 H03	X7R (EIA)	25Vdc	0.47µF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER71E474K1 H03	X7R (EIA)	25Vdc	0.47µF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER71E684K1 H03	X7R (EIA)	25Vdc	0.68µF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER71E684K1 H03	X7R (EIA)	25Vdc	0.68µF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER71E105K1 H03	X7R (EIA)	25Vdc	1.0µF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER71E105K1 H03	X7R (EIA)	25Vdc	1.0µF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER71E155K2 H03	X7R (EIA)	25Vdc	1.5µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER71E155K2 H03	X7R (EIA)	25Vdc	1.5µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER71E225K2 H03	X7R (EIA)	25Vdc	2.2µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER71E225K2 H03	X7R (EIA)	25Vdc	2.2µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER71E335K2 H03	X7R (EIA)	25Vdc	3.3µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER71E335K2 H03	X7R (EIA)	25Vdc	3.3µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER71E475K2 H03	X7R (EIA)	25Vdc	4.7µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER71E475K2 H03	X7R (EIA)	25Vdc	4.7µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER71E106K3 H03	X7R (EIA)	25Vdc	10µF±10%	5.5×5.0	4.0	2.5	A2	DB
RCER71E106K3 H03	X7R (EIA)	25Vdc	10µF±10%	5.5×5.0	4.0	5.0	K1	M1
RCER71E226MW H03	X7R (EIA)	25Vdc	22µF±20%	5.5×7.5	4.0	5.0	K1	M1
RCER71H221K0 H03	X7R (EIA)	50Vdc	220pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H221K0 H03	X7R (EIA)	50Vdc	220pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H331K0 H03	X7R (EIA)	50Vdc	330pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H331K0 H03	X7R (EIA)	50Vdc	330pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H471K0 H03	X7R (EIA)	50Vdc	470pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H471K0 H03	X7R (EIA)	50Vdc	470pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H681K0 H03	X7R (EIA)	50Vdc	680pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H681K0 H03	X7R (EIA)	50Vdc	680pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H102K0 H03	X7R (EIA)	50Vdc	1000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H102K0 H03	X7R (EIA)	50Vdc	1000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H152K0 H03	X7R (EIA)	50Vdc	1500pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H152K0 H03	X7R (EIA)	50Vdc	1500pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H222K0 H03	X7R (EIA)	50Vdc	2200pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H222K0 H03	X7R (EIA)	50Vdc	2200pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H332K0 H03	X7R (EIA)	50Vdc	3300pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H332K0 H03	X7R (EIA)	50Vdc	3300pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H472K0 H03	X7R (EIA)	50Vdc	4700pF±10%	3.6×3.5	2.5	2.5	A2	DB

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RCER71H472K0 H03	X7R (EIA)	50Vdc	4700pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H682K0 H03	X7R (EIA)	50Vdc	6800pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H682K0 H03	X7R (EIA)	50Vdc	6800pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H103K0 H03	X7R (EIA)	50Vdc	10000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H103K0 H03	X7R (EIA)	50Vdc	10000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H153K0H03_	X7R (EIA)	50Vdc	15000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H153K0 H03	X7R (EIA)	50Vdc	15000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H223K0 H03	X7R (EIA)	50Vdc	22000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H223K0 H03	X7R (EIA)	50Vdc	22000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H333K0 H03	X7R (EIA)	50Vdc	33000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H333K0 H03	X7R (EIA)	50Vdc	33000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H473K0 H03	X7R (EIA)	50Vdc	47000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H473K0 H03	X7R (EIA)	50Vdc	47000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H683K0 H03	X7R (EIA)	50Vdc	68000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H683K0 H03	X7R (EIA)	50Vdc	68000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H104K0 H03	X7R (EIA)	50Vdc	0.10µF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER71H104K0 H03	X7R (EIA)	50Vdc	0.10µF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER71H154K1 H03	X7R (EIA)	50Vdc	0.15µF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER71H154K1 H03	X7R (EIA)	50Vdc	0.15µF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER71H224K1 H03	X7R (EIA)	50Vdc	0.22µF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER71H224K1 H03	X7R (EIA)	50Vdc	0.22µF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER71H334K1 H03	X7R (EIA)	50Vdc	0.33µF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER71H334K1	X7R (EIA)	50Vdc	0.33µF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER71H474K1 H03	X7R (EIA)	50Vdc	0.47µF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER71H474K1 H03	X7R (EIA)	50Vdc	0.47µF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER71H684K2 H03	X7R (EIA)	50Vdc	0.68µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER71H684K2 H03	X7R (EIA)	50Vdc	0.68µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCEC71H105K1 H03	X7S (EIA)	50Vdc	1.0µF±10%	4.0×3.5	2.5	2.5	A2	DB
RCEC71H105K1 H03	X7S (EIA)	50Vdc	1.0µF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER71H105K2 H03	X7R (EIA)	50Vdc	1.0µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER71H105K2 H03	X7R (EIA)	50Vdc	1.0µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER71H155K2 H03	X7R (EIA)	50Vdc	1.5µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER71H155K2	X7R (EIA)	50Vdc	1.5µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER71H225K2 H03	X7R (EIA)	50Vdc	2.2µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER71H225K2 H03	X7R (EIA)	50Vdc	2.2µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER71H335K3 H03	X7R (EIA)	50Vdc	3.3µF±10%	5.5×5.0	4.0	2.5	A2	DB
RCER71H335K3 H03	X7R (EIA)	50Vdc	3.3µF±10%	5.5×5.0	4.0	5.0	K1	M1
RCEC71H475K2 H03	X7S (EIA)	50Vdc	4.7µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCEC71H475K2 H03	X7S (EIA)	50Vdc	4.7µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER71H475K3 H03	X7R (EIA)	50Vdc	4.7µF±10%	5.5×5.0	4.0	2.5	A2	DB
RCER71H475K3	X7R (EIA)	50Vdc	4.7µF±10%	5.5×5.0	4.0	5.0	K1	M1
RCEC71H106K3	X7S (EIA)	50Vdc	10µF±10%	5.5×5.0	4.0	2.5	A2	DB
RCEC71H106K3	X7S (EIA)	50Vdc	10µF±10%	5.5×5.0	4.0	5.0	K1	M1
RCER71H106MW H03	X7R (EIA)	50Vdc	10µF±20%	5.5×7.5	4.0	5.0	K1	M1
RCEC71H226MW H03	X7S (EIA)	50Vdc	22µF±20%	5.5×7.5	4.0	5.0	K1	M1
RCER72A221K0 H03	X7R (EIA)	100Vdc	220pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER72A221K0 H03	X7R (EIA)	100Vdc	220pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER72A331K0 H03	X7R (EIA)	100Vdc	330pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER72A331K0 H03	X7R (EIA)	100Vdc	330pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER72A471K0 H03	X7R (EIA)	100Vdc	470pF±10%	3.6×3.5	2.5	2.5	A2	DB
	X7R (EIA)	100Vdc	470pF±10%	3.6×3.5	2.5	5.0	K1	M1
	X7R (EIA)	100Vdc	680pF±10%	3.6×3.5	2.5	2.5	A2	DB
	X7R (EIA)	100Vdc	680pF±10%	3.6×3.5	2.5	5.0	K1	M1
	X7R (EIA)	100Vdc	1000pF±10%	3.6×3.5	2.5	2.5	A2	DB
	X7R (EIA)	100Vdc	1000pF±10%	3.6×3.5	2.5	5.0	K1	M1
	X7R (EIA)	100Vdc	1500pF±10%	3.6×3.5	2.5	2.5	A2	DB M1
RCER72A152K0 H03	X7R (EIA)	100Vdc	1500pF±10%	3.6×3.5	2.5	5.0	K1	M1

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RCER72A222K0 H03	X7R (EIA)	100Vdc	2200pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER72A222K0 H03	X7R (EIA)	100Vdc	2200pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER72A332K0 H03	X7R (EIA)	100Vdc	3300pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER72A332K0 H03	X7R (EIA)	100Vdc	3300pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER72A472K0 H03	X7R (EIA)	100Vdc	4700pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER72A472K0 H03	X7R (EIA)	100Vdc	4700pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER72A682K0 H03	X7R (EIA)	100Vdc	6800pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER72A682K0 H03	X7R (EIA)	100Vdc	6800pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER72A103K0 H03	X7R (EIA)	100Vdc	10000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER72A103K0 H03	X7R (EIA)	100Vdc	10000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER72A153K0 H03	X7R (EIA)	100Vdc	15000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER72A153K0 H03	X7R (EIA)	100Vdc	15000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER72A223K0 H03	X7R (EIA)	100Vdc	22000pF±10%	3.6×3.5	2.5	2.5	A2	DB
RCER72A223K0 H03	X7R (EIA)	100Vdc	22000pF±10%	3.6×3.5	2.5	5.0	K1	M1
RCER72A333K1	X7R (EIA)	100Vdc	33000pF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER72A333K1	X7R (EIA)	100Vdc	33000pF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER72A473K1 H03	X7R (EIA)	100Vdc	47000pF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER72A473K1 H03	X7R (EIA)	100Vdc	47000pF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER72A683K1	X7R (EIA)	100Vdc	68000pF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER72A683K1	X7R (EIA)	100Vdc	68000pF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER72A104K1	X7R (EIA)	100Vdc	0.10µF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER72A104K1	X7R (EIA)	100Vdc	0.10µF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER72A154K2	X7R (EIA)	100Vdc	0.15µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER72A154K2	X7R (EIA)	100Vdc	0.15µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72A224K2	X7R (EIA)	100Vdc	0.22µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER72A224K2 H03	X7R (EIA)	100Vdc	0.22µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72A334K1 H03	X7R (EIA)	100Vdc	0.33µF±10%	4.0×3.5	2.5	2.5	A2	DB
RCER72A334K1	X7R (EIA)	100Vdc	0.33µF±10%	4.0×3.5	2.5	5.0	K1	M1
RCER72A474K2 H03	X7R (EIA)	100Vdc	0.47µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER72A474K2 H03	X7R (EIA)	100Vdc	0.47µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72A684K2	X7R (EIA)	100Vdc	0.68µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER72A684K2 H03	X7R (EIA)	100Vdc	0.68µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72A105K2	X7R (EIA)	100Vdc	1.0µF±10%	5.5×4.0	3.15	2.5	A2	DB
RCER72A105K2	X7R (EIA)	100Vdc	1.0µF±10%	5.5×4.0	3.15	5.0	K1	M1
RCEC72A155K3	X7S (EIA)	100Vdc	1.5µF±10%	5.5×5.0	4.0	2.5	A2	DB
RCEC72A155K3	X7S (EIA)	100Vdc	1.5µF±10%	5.5×5.0	4.0	5.0	K1	M1
RCEC72A225K3	X7S (EIA)	100Vdc	2.2µF±10%	5.5×5.0	4.0	2.5	A2	DB
RCEC72A225K3	X7S (EIA)	100Vdc	2.2µF±10%	5.5×5.0	4.0	5.0	K1	M1
RCEC72A475MW	X7S (EIA)	100Vdc	4.7µF±20%	5.5×7.5	4.0	5.0	K1	M1
RCER72E102K1	X7R (EIA)	250Vdc	1000pF±10%	4.0×3.5	3.15	5.0	K1	M1
RCER72E152K1	X7R (EIA)	250Vdc	1500pF±10%	4.0×3.5	3.15	5.0	K1	M1
	X7R (EIA)	250Vdc	2200pF±10%	4.0×3.5	3.15	5.0	K1	M1
RCER72E332K1 HO3	X7R (EIA)	250Vdc	3300pF±10%	4.0×3.5	3.15	5.0	K1	M1
RCER72E472K1 H03	X7R (EIA)	250Vdc	4700pF±10%	4.0×3.5	3.15	5.0	K1	M1
RCER72E682K1 H03	X7R (EIA)	250Vdc	6800pF±10%	4.0×3.5	3.15	5.0	K1	M1
RCER72E103K1	X7R (EIA)	250Vdc	10000pF±10%	4.0×3.5	3.15	5.0	K1	M1
	X7R (EIA)	250Vdc	15000pF±10%	4.0×3.5	3.15	5.0	K1	M1
	X7R (EIA)	250Vdc	22000pF±10%	4.0×3.5	3.15	5.0	K1	M1
	X7R (EIA)	250Vdc	33000pF±10%	5.5×4.0	3.15	5.0	K1	M1
	X7R (EIA)	250Vdc	47000pF±10%	5.5×4.0	3.15	5.0	K1	M1
	X7R (EIA)	250Vdc	68000pF±10%	5.5×4.0	3.15	5.0 E.O	K1	M1
	X7R (EIA)	250Vdc	0.10µF±10%	5.5×4.0	3.15	5.0	K1	M1 M1
RCER72E154K3 H03 RCER72E224K3 H03	X7R (EIA)	250Vdc 250Vdc	0.15µF±10%	5.5×5.0 5.5×5.0	4.0	5.0	K1 K1	M1 M1
RCER72E224K3H03_	X7R (EIA) X7R (EIA)	250Vdc 250Vdc	0.22µF±10% 0.33µF±10%	5.5×5.0 7.5×5.5	4.0	5.0	KI K1	M1 M1
RCER72E334K4H03_	X7R (EIA) X7R (EIA)	250Vdc 250Vdc	0.33µF±10% 0.47µF±10%	7.5×5.5 7.5×5.5	4.0	5.0	KI K1	M1
RCER72E684K5	X7R (EIA)	250Vdc	0.47µF±10%	7.5×5.5 7.5×7.5	4.0	5.0	B1	E1
	ATR (EIA)	200000	0.00µ110//	1.3*1.3	4.0			

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• This catalog has only typical specifications. Therefore, please approve our product specifications or transact the approval sheet for product specifications before ordering.								
Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RCER72E105K5 H03	X7R (EIA)	250Vdc	1.0µF±10%	7.5×7.5	4.0	5.0	B1	E1
RCER72E225MU H03	X7R (EIA)	250Vdc	2.2µF±20%	7.5×12.5	4.0	5.0	B1	E1
RCER72J102K2 H03	X7R (EIA)	630Vdc	1000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72J152K2 H03	X7R (EIA)	630Vdc	1500pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72J222K2 H03	X7R (EIA)	630Vdc	2200pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72J332K2	X7R (EIA)	630Vdc	3300pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72J472K2	X7R (EIA)	630Vdc	4700pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72J682K2 H03	X7R (EIA)	630Vdc	6800pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72J103K2	X7R (EIA)	630Vdc	10000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72J153K2	X7R (EIA)	630Vdc	15000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72J223K2	X7R (EIA)	630Vdc	22000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER72J333K3	X7R (EIA)	630Vdc	33000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RCER72J473K3 H03	X7R (EIA)	630Vdc	47000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RCER72J683K4 H03	X7R (EIA)	630Vdc	68000pF±10%	7.5×5.5	4.0	5.0	K1	M1
RCER72J104K4 H03	X7R (EIA)	630Vdc	0.10µF±10%	7.5×5.5	4.0	5.0	K1	M1
RCER72J154K5	X7R (EIA)	630Vdc	0.15µF±10%	7.5×8.0	4.0	5.0	B1	E1
RCER72J224K5	X7R (EIA)	630Vdc	0.22µF±10%	7.5×8.0	4.0	5.0	B1	E1
RCER72J474MU	X7R (EIA)	630Vdc	0.47µF±20%	7.7×13.0	4.0	5.0	B1	E1
RCER73A102K2	X7R (EIA)	1000Vdc	1000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER73A152K2	X7R (EIA)	1000Vdc	1500pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER73A222K2 H03	X7R (EIA)	1000Vdc	2200pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER73A332K2 H03	X7R (EIA)	1000Vdc	3300pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER73A472K2 H03	X7R (EIA)	1000Vdc	4700pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER73A682K2 H03	X7R (EIA)	1000Vdc	6800pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER73A103K2	X7R (EIA)	1000Vdc	10000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RCER73A153K3	X7R (EIA)	1000Vdc	15000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RCER73A223K3	X7R (EIA)	1000Vdc	22000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RCER73A333K4 H03	X7R (EIA)	1000Vdc	33000pF±10%	7.5×5.5	4.0	5.0	K1	M1
RCER73A473K4 H03	X7R (EIA)	1000Vdc	47000pF±10%	7.5×5.5	4.0	5.0	K1	M1
RCER73A683K5	X7R (EIA)	1000Vdc	68000pF±10%	7.5×8.0	4.0	5.0	B1	E1
RCER73A104K5	X7R (EIA)	1000Vdc	0.10µF±10%	7.5×8.0	4.0	5.0	B1	E1
RCER73A224MU H03	X7R (EIA)	1000Vdc	0.22µF±20%	7.7×13.0	4.0	5.0	B1	E1

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Two blank columns are filled with the lead style code. Please refer to the 3 columns on the right for the appropriate code.

The last blank column is filled with the packaging code. (B: bulk, A: ammo pack)

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Temperature Compensating Type Specifications and Test Methods

No.	AEC-Q200) Test Item	Specifications	AEC-Q200 Test Method
1	Pre-and P	ost-Stress		_
-	Electrical			-
	High Tem	perature (Storage)	The measured and observed characteristics should satisfy the specifications in the following table.	
	Lyposure	Appearance	No defects or abnormalities	-
		Capacitance	Within ±3% or ±0.3pF (Whichever is larger)	
2		Change Q	30pF ≦ C: Q ≧ 350 10pF ≦ C < 30pF: Q ≧ 275+5C/2 10pF > C: Q ≧ 200+10C	Sit the capacitor for 1000±12h at 150±3°C. Let sit for 24±2h at room condition*, then measure.
			C. Naminal Canaditanas (nE)	
		I.R.	C: Nominal Capacitance (pF)	-
	Tomporat		More than $1000M\Omega$ or $50M\Omega \cdot \mu F$ (Whichever is smaller)	
	Temperat Cycling	ure	The measured and observed characteristics should satisfy the specifications in the following table.	-
		Appearance	No defects or abnormalities	Perform the 1000 cycles according to the four heat treatments
		Capacitance Change	Within ±5% or ±0.5pF (Whichever is larger)	listed in the following table. Let sit for 24±2h at room condition*, then measure.
3		Q	$30pF \le C: Q \ge 350$ $10pF \le C < 30pF: Q \ge 275+5C/2$ $10pF > C: Q \ge 200+10C$	Step 1 2 3 4 Temp. (°C) -55+0/-3 Room Temp. 125+3/-0 Room Temp. Time (min) 15±3 1 15±3 1
			C: Nominal Capacitance (pF)	
		I.R.	1000M Ω or 50M Ω • μF min. (Whichever is smaller)	
	Moisture Resistanc	e	The measured and observed characteristics should satisfy the specifications in the following table.	Apply the 24h heat (25 to 65°C) and humidity (80 to 98%) treatment shown below, 10 consecutive times.
		Appearance	No defects or abnormalities	Let sit for 24±2h at room condition*, then measure.
		Capacitance Change	Within ±5% or ±0.5pF (Whichever is larger)	Humidity Humidity Humidity Humidity Humidity (°C) 90-98% 80-98% 80-98% 80-98% 90-98% 70 65 10 10 10 10 10 10 10 10 10 10
4		Q	30pF ≦ C: Q ≧ 200 30pF > C: Q ≧ 100+10C/3	
		I.R.	C: Nominal Capacitance (pF) 500MΩ or 25MΩ • μF min. (Whichever is smaller)	30
	Biased Hu	umidity	The measured and observed characteristics should satisfy the specifications in the following table.	
		Appearance	No defects or abnormalities	
5		Capacitance Change	Within ±5% or ±0.5pF (Whichever is larger)	Apply the rated voltage and DC1.3+0.2/-0V (add $100k\Omega$ resistor) at 85±3°C and 80 to 85% humidity for $1000\pm12h$.
		Q	30pF ≦ C: Q ≧ 200 30pF > C: Q ≧ 100+10C/3	Remove and let sit for 24±2h at room condition*, then measure. The charge/discharge current is less than 50mA.
			C: Nominal Capacitance (pF)	
		I.R.	500MΩ or 25MΩ • μ F min. (Whichever is smaller)	1
	Operatior	nal Life	The measured and observed characteristics should satisfy the specifications in the following table.	
		Appearance	No defects or abnormalities	Apply the voltage shown in the table for 1000±12h at 125±3°C.
		Capacitance Change	Within ±3% or ±0.3pF (Whichever is larger)	Let sit for 24±2h at room condition*, then measure. The charge/discharge current is less than 50mA.
6		Q	30pF ≦ C: Q ≧ 350 10pF ≦ C < 30pF: Q ≧ 275+5C/2 10pF > C: Q ≧ 200+10C	Rated VoltageTest VoltageDC50V, DC100V200% of the rated voltageDC250V150% of the rated voltageDC630V, DC1kV120% of the rated voltage
			C: Nominal Capacitance (pF)	
		I.R.	1000M\Omega or 50MΩ ${\scriptstyle \bullet}$ µF min. (Whichever is smaller)	

* "room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

Temperature Compensating Type Specifications and Test Methods

Continued from the preceding page. \searrow

No.	AEC-Q200) Test Item	Specifications	AEC-Q200 Test Method			
7	External \	Visual	No defects or abnormalities	Visual inspection			
8	Physical D	Dimension	Within the specified dimensions	Using calipers and micrometers			
9	Marking		To be easily legible	Visual inspection			
		Appearance	No defects or abnormalities	Per MIL-STD-202 Method 215			
		Capacitance	Within the specified tolerance	Solvent 1: 1 part (by volume) of isopropyl alcohol			
	Resistance	Q	30pF ≦ C: Q ≧ 1000	- 3 parts (by volume) of mineral spirits Solvent 2: Terpene defluxer			
10	to Solvents		30pF > C: Q ≧ 400+20C	Solvent 3: 42 parts (by volume) of water			
			C: Nominal Capacitance (pF)	1 part (by volume) of propylene glycol monomethyl ether			
		I.R.	More than 10000M Ω or 500M Ω • μF (Whichever is smaller)	1 part (by volume) of monoethanolamine			
		Appearance	No defects or abnormalities				
		Capacitance	Within the specified tolerance	Three shocks in each direction should be applied along 3 mutually perpendicular axes of the test specimen (18 shocks)			
11	Mechanical Shock		30pF ≦ C : Q ≧ 1000	The specified test pulse should be Half-sine and should			
	SHOCK	Q	30pF > C : Q ≧ 400+20C	have a duration: 0.5ms, peak value: 1500G and velocity change: 4.7m/s.			
			C : Nominal Capacitance (pF)	4.711/5.			
		Appearance	No defects or abnormalities	The capacitor should be subjected to a simple harmonic motion			
		Capacitance	Within the specified tolerance	having a total amplitude of 1.5mm, the frequency being varied uniformly between the approximate limits of 10 and 2000Hz.			
12	Vibration		30pF ≦ C: Q ≧ 1000	The frequency range, from 10 to 2000Hz and return to 10Hz,			
		Q	30pF > C: Q ≧ 400+20C	should be traversed in approximately 20min. This motion			
			C: Nominal Capacitance (pF)	should be applied for 12 items in each 3 mutually perpendic directions (total of 36 times).			
	Resistance	to	The measured and observed characteristics should satisfy the				
	Soldering H		specifications in the following table.				
	(Non-Preheat)	Appearance	No defects or abnormalities	The lead wires should be immersed in the melted solder 1.5 to			
13		Capacitance	Within ±2.5% or ±0.25pF (Whichever is larger)	2.0mm from the root of terminal at 260 ± 5 °C for 10 ± 1 s.			
1		Change		Post-treatment Capacitor should be stored for 24±2h at room condition*.			
		Dielectric Strength		Capacitor should be stored for 24±211 at room condition .			
		(Between	No defects				
	Terminals						
	Resistance to Soldering Heat		The measured and observed characteristics should satisfy the specifications in the following table.				
	(On-Preheat)	Appearance	No defects or abnormalities	First the capacitor should be stored at 120+0/-5°C for 60+0/-5			
13		Capacitance		Then, the lead wires should be immersed in the melted solder 1.			
' 2		Change	Within ±2.5% or ±0.25pF (Whichever is larger)	to 2.0mm from the root of terminal at 260±5°C for 7.5+0 – Post-treatment			
		Dielectric		Capacitor should be stored for 24±2h at room condition*.			
		Strength (Between	No defects				
		Terminals)					
	Resistance		The measured and observed characteristics should satisfy the				
	Soldering H (soldering		specifications in the following table.	Test condition Temperature of iron-tip: 350±10°C			
13	iron method)	Appearance	No defects or abnormalities	– Soldering time: 3.5±0.5s			
		Capacitance Change	Within ±2.5% or ±0.25pF (Whichever is larger)	Soldering position Straight Lead: 1.5 to 2.0mm from the root of terminal.			
3		Dielectric		Crimp Lead: 1.5 to 2.0mm from the end of lead bend.			
		Strength	No defects	Post-treatment Capacitor should be stored for 24±2h at room condition*.			
		(Between Terminals)		Capacitor should be stored for 24±211 at room condition .			
	_	,	The measured and observed characteristics should satisfy the				
	Thermal S	Shock	specifications in the following table.				
		Appearance	No defects or abnormalities	 Perform the 300 cycles according to the two heat treatments 			
		Capacitance	Within ±5% or ±0.5pF (Whichever is larger)	listed in the following table (Maximum transfer time is 20s).			
14		Change		Let sit for 24±2h at room condition*, then measure.			
			30pF ≦ C: Q ≧ 350 10pF ≦ C < 30p: Q ≧ 275+5C/2	Step 1 2 Temp. (°C) -55+0/-3 125+3/-0			
		Q	10pF > C: Q ≧ 200+10C	Temp. (°C) -55+0/-3 125+3/-0 Time (min) 15±3 15±3			
			C: Nominal Capacitance (pF)				
		I.R.		-			
		1.13.	1000MΩ or 50MΩ • μ F min. (Whichever is smaller)				

* "room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa



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Temperature Compensating Type Specifications and Test Methods

Continued from the preceding page. \searrow

No.	AEC-Q200) Test Item	Specifi	cations	AEC	-Q200 Test Me	thod
		Appearance	No defects or abnormalities				
		Capacitance	Within the specified tolerance		-		
15	ESD	Q	30pF ≦ C: Q ≧ 1000 30pF > C: Q ≧ 400+20C				
			C: Nominal Capacitance (pF)				
		I.R.	More than $10000M\Omega$ or $500M\Omega$	2 • μF (Whichever is smaller)			
16	6 Solderability		Lead wire should be soldered w direction over 95% of the circur	Should be placed into steam aging for 8h±15min. The terminal of capacitor is dipped into a solution of ethanol (JIS K 8101) and rosin (JIS K 5902) (25% rosin in weight propotion). Immerse in solder solution for 2±0.5s. In both cases the depth of dipping is up to about 1.5 to 2mm from the terminal body.			
		Appearance	No defects or abnormalities		Visual inspection		
		Capacitance	Within the specified tolerance		The capacitance, Q shou		
		Q	30pF ≦ C: Q ≧ 1000 30pF > C: Q ≧ 400+20C				Voltage AC0.5 to 5V (r.m.s.)
			C: Nominal Capacitance (pF)	10μF≧C>1000pF C>10μF	1±0.1kHz 120±24Hz	AC1±0.2V (r.m.s.) AC0.5±0.1V (r.m.s.)	
		I.R.	Between Terminals	10000MΩ or 500MΩ • µF min. (Whichever is smaller)	The insulation resistance voltage shown in the tab of charging. Rated Vo DC25V, DC50V, DC10 DC630V, DC1kV	ole at 25°C with Itage	asured with a DC
17	Electrical Charac- terization	Dielectric Strength	Between Terminals	No defects or abnormalities	The capacitor should nor shown in the table is app for 1 to 5s. (Charge/Discharge curre Rated Voltage DC50V, DC100V DC250V DC630V DC1kV	blied between t ent ≦ 50mA.) 300% c 200% c 150% c	-
			Body Insulation	No defects or abnormalities	The capacitor is placed i diameter so that each te approximately 2mm from the table is impressed for and metal balls. (Charge/Discharge curre Rated Voltage DC25V, DC50V, DC10 DC250V DC630V, DC1kV	erminal, short-c m the balls, and or 1 to 5s betwe ent ≦ 50mA.) 00V 250% (ircuit is kept DC voltage shown in een capacitor terminals Test Voltage of the rated voltage of the rated voltage
18	Terminal Strength	Tensile Strength	Termination not to be broken o	Termination not to be broken or loosened			apply the force tion of the capacitor rce applied for
	-	Bending Strength	Termination not to be broken o	rloosened	Each lead wire should be subjected to a force of 2.5N and then be bent 90° at the point of egress in one direction. Each wire is then returned to the original position and bent 90° in the opposite direction at the rate of one bend per 2 to 3s.		

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Temperature Compensating Type Specifications and Test Methods

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No.	AEC-Q200 Test Item	Specifications			AEC-Q200 Test Method			
					The capacitance change should be measured after 5min at each specified temperature step.			
19	Capacitance Temperature Characteristics	Char. COG U2J	Temperature Coefficient 25 to 125°C: 0±30ppm/°C -55 to 25°C: 0+30/-72ppm/°C 25 to 125°C: -750±120ppm/°C -55 to 25°C: -750+120/-347ppm/°C		Step 1 2 3 4 5 The temperature coefficient is capacitance measured in step 3 the temperature sequentially fr +125°C) the capacitance shoul tolerance for the temperature of the capacitance drift is calucul	3 as a reference. When cycling rom step 1 through 5 (-55 to d be within the specified		
					betweeen the maximum and minimum measured values in the step 1, 3 and 5 by the capacitance value in step 3.			

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No. AEC-Q200 Test Item) Test Item	Specifications	AEC-Q200 Test Method			
1	Pre-and Post-Stress Electrical Test			-			
	High Tem Exposure	perature (Storage)	The measured and observed characteristics should satisfy the specifications in the following table.				
		Appearance	No defects or abnormalities	Sit the capacitor for 1000±12h at 150±3°C. Let sit for 24±2h			
2		Capacitance Change	Within ±12.5%	 at room condition*, then measure. •Pretreatment Perform the heat treatment at 150+0/-10°C for 60±5min 			
		D.F.	0.04 max.	and then let sit for 24±2h at room condition*.			
		I.R.	More than 1000M Ω or 50M Ω • μF (Whichever is smaller)	_			
	Temperat Cycling	ure	The measured and observed characteristics should satisfy the specifications in the following table.	Perform the 1000 cycles according to the four heat treatments listed in the following table. Let sit for 24±2h at room condition*,			
		Appearance	No defects or abnormalities	then measure.			
3		Capacitance Change	Within ±12.5%	Step 1 2 3 4 Temp. (°C) -55+0/-3 Room Temp. 125+3/-0 Room Temp. Time (min) 15±3 1 15±3 1			
		D.F.	0.05 max.	Pretreatment			
		I.R.	1000M Ω or 50M Ω • μF min. (Whichever is smaller)	Perform the heat treatment at 150+0/-10°C for 60±5min and then let sit for 24±2h at room condition*.			
	Moisture Resistanc	e	The measured and observed characteristics should satisfy the specifications in the following table.	Apply the 24h heat (25 to 65°C) and humidity (80 to 98%) treatment shown below, 10 consecutive times.			
		Appearance	No defects or abnormalities	Let sit for 24±2h at room condition*, then measure. •Pretreatment			
		Capacitance Change	Within ±12.5%	Perform the heat treatment at 150+0/-10°C for 60±5min and then let sit for 24±2h at room condition*.			
		D.F.	0.05 max.	Humidity Humidity Humidity Humidity Humidity (°C) 90-98% 80-98% 90-98% 80-98% 90-98%			
4		I.R.	500MΩ or 25MΩ • μF min. (Whichever is smaller)	70 65 66 67 67 67 67 67 67 67 67 67			
	Biased Hu	umidity	The measured and observed characteristics should satisfy the specifications in the following table.	Apply the rated voltage and DC1.3+0.2/-0V (add 100k Ω resistor)			
		Appearance	No defects or abnormalities	at 85±3°C and 80 to 85% humidity for 1000±12h. Remove and let sit for 24±2h at room condition*, then measure.			
5		Capacitance Change	Within ±12.5%	The charge/discharge current is less than 50mA. •Pretreatment			
		D.F.	0.05 max.	Perform the heat treatment at 150+0/-10°C for 60±5min and then let sit for 24±2h at room condition*.			
		I.R.	500MΩ or 25MΩ • μF min. (Whichever is smaller)				

* "room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

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No.	AEC-Q200	Test Item	Specifications	AEC-Q200	Test Method		
	Operation	al Life Appearance	The measured and observed characteristics should satisfy the specifications in the following table. No defects or abnormalities	Apply the voltage shown in the table for 1000±12h at 125±3°C. Let sit for 24±2h at room condition*, then measure. The charge/discharge current is less than 50mA.			
6		Capacitance Change	Within ±12.5%	 •Pretreatment Apply test voltage for 60±5m Remove and let sit for 24±2h 			
•		D.F.	0.04 max.	Rated Voltage	Test Voltage		
		I.R.	1000M Ω or 50M Ω • μF min. (Whichever is smaller)	DC25V, DC50V, DC100V DC250V DC630V DC1kV	200% of the rated voltage *1 150% of the rated voltage 120% of the rated voltage 110% of the rated voltage		
7	External \	/isual	No defects or abnormalities	Visual inspection			
8	Physical D	imension	Within the specified dimensions	Using calipers and micrometer	s		
9	Marking		To be easily legible	Visual inspection			
		Appearance	No defects or abnormalities	Per MIL-STD-202 Method 215			
		Capacitance	Within the specified tolerance	Solvent 1: 1 part (by volume)	of isopropyl alcohol		
	Resistance	D.F.	0.025 max.	- 3 parts (by volume Solvent 2: Terpene defluxer	e) of mineral spirits		
10	to Solvents	I.R.	Rated Voltage: DC25V, DC50V, DC100V More than 10000MΩ or 500MΩ • μF (Whichever is smaller) Rated Voltage: DC250V, DC500V, DC630V, DC1kV More than 10000MΩ or 100MΩ • μF (Whichever is smaller)	Solvent 2: Terpene deluxer Solvent 3: 42 parts (by volume) of water 1 part (by volume) of propylene glycol monomethyl ether 1 part (by volume) of monoethanolamine			
		Appearance	No defects or abnormalities	Three shocks in each direction should be applied along			
11	Mechanical	Capacitance	Within the specified tolerance	3 mutually perpendicular axes The specified test pulse should	of the test specimen (18 shocks).		
	Shock	D.F.	0.025 max.	have a duration: 0.5ms, peak value: 1500G and velocity cha 4.7m/s.			
		Appearance	No defects or abnormalities	The capacitor should be subjected to a simple harmonic			
		Capacitance	Within the specified tolerance		mm, the frequency being varied		
12	Vibration	D.F.	0.025 max.	uniformly between the approximate limits of 10 and 2000 The frequency range, from 10 to 2000Hz and return to 10 should be traversed in approximately 20min. This motion sh be applied for 12 items in each 3 mutually perpendicular directions (total of 36 times).			
	Resistance Soldering H	· · · · · · · · · · · · · · · · · · ·		- The lead wires should be immersed in the melted solder 1.5 to			
	(Non-Preheat)	Appearance	No defects or abnormalities	2.0mm from the root of termin			
13 ' 1		Capacitance Change	Within ±7.5%		: 150+0/-10°C for 1h, then place		
T		Dielectric Strength (Between Terminals)	No defects	at room temperature for 24±2h before initial measurement. Post-treatment Capacitor should be stored for 24±2h at room condition*.			
	Resistance Soldering H		The measured and observed characteristics should satisfy the specifications in the following table.	First the capacitor should be s	tored at 120+0/-5°C for 60+0/-5s.		
	(On-Preheat)	Appearance	No defects or abnormalities		immersed in the melted solder 1.5		
13 ' 2		Capacitance Change	Within ±7.5%	Pre-treatment	ninal at 260±5°C for 7.5+0/-1s. 150+0/-10°C for 1h, then place at		
2		Dielectric Strength (Between Terminals)	No defects	Capacitor should be stored at 150+07-10°C for 1n, then room temperature for 24±2h before initial measurement Post-treatment Capacitor should be stored for 24±2h at room condition?			

* "room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

*1: below parts are applicable in rated voltage×150%.

Char.	Rated Voltage	Capacitance	Dimensions
C7	1H	105	1
C7	1H	475	2
C7	1H	106	3
C7	1H	226	W
R7	2A	334	1
R7	2A	474-105	2
C7	2A	155-225	3
C7	2A	475	W

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No.	lo. AEC-Q200 Test Iten			Specifications	AEC-Q200 Test	t Method		
	Resistance			served characteristics should satisfy the	Test condition Temperature of iron-tip: 350±10°C			
	Soldering H (Soldering	Appearance	specifications in the f	•	Soldering time: 3.5±0.5s.			
13	Iron Method)	Capacitance Change	Within ±7.5%	laittes	Soldering position Straight Lead: 1.5 to 2.0mm from t Crimp Lead: 1.5 to 2.0mm from the			
З		Dielectric Strength (Between Terminals)	No defects		Pre-treatment Capacitor should be stored at 150- at room temperature for 24±2h be Post-treatment Capacitor should be stored for 24±	+0/-10°C for 1h, then place fore initial measurement.		
	Thermal S	ihock	The measured and ob specifications in the f	served characteristics should satisfy the ollowing table.	Perform the 300 cycles according t listed in the following table (Maximu	um transfer time is 20s).		
		Appearance	No defects or abnorm	alities	Let sit for 24±2h at room condition			
14		Capacitance Change	Within ±12.5%		Step 1 Temp. (°C) -55+0/-3 Time (min) 15±3	2 125+3/-0 15±3		
		D.F.	0.05 max.			1515		
		I.R.	1000MΩ or 50MΩ • μ	F min. (Whichever is smaller)	Perform the heat treatment at 15 and then let sit for 24±2h at room			
		Appearance	No defects or abnorm	alities				
		Capacitance	Within the specified t	olerance				
15	ESD	D.F.	0.025 max.					
15	ESD	I.R.	Rated Voltage: DC25	V, DC50V, DC100V e or 500MΩ • μF (Whichever is smaller) 0V, DC500V, DC630V, DC1kV e or 100MΩ • μF (Whichever is smaller)	Per AEC-Q200-002			
16	Solderabi	lity		oldered with uniform coating on the axial the circumferential direction.	Should be placed into steam aging for 8h±15min. The terminal of capacitor is dipped into a solution of ethanol (JIS K 8101) and rosin (JIS K 5902) (25% rosin in weight propotion). Immerse in solder solution for 2±0.5s. In both cases the depth of dipping is up to about 1.5 to 2mm from the terminal body.			
		Appearance	No defects or abnorm	alities	Visual inspection			
		Capacitance	Within the specified t	olerance	The capacitance/D.F. should be me			
		D.F.	0.025 max.		eq:shown in the shown in the shown in the shown in the C	Voltage Iz AC0.5 to 5V (r.m.s.) Iz AC1±0.2V (r.m.s.)		
		I.R.	Between Terminals	Rated Voltage: DC25V, DC50V, DC100V More than 10000MΩ or 500MΩ • μF (Whichever is smaller) Rated Voltage: DC250V, DC500V, DC630V, DC1kV	The insulation resistance should be voltage shown in the table at 25°C of charging. Rated Voltage DC25V, DC50V, DC100V, DC250	within 2min Measuring Voltage		
				More than 10000M Ω or 100M Ω • μF (Whichever is smaller)	DC630V, DC1kV	DC500V		
17	Electrical Charac- terization	Dielectric	Between Terminals	No defects or abnormalities	DC250V 200 DC630V 150	en the terminations		
		Strength	Body Insulation	No defects or abnormalities	DC250V 200	rt-circuit is kept and 250% of the rated DC ssed for 1 to 5s between		

* "room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

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No.	AEC-Q200) Test Item	Specifications	AEC-Q200 Test Method		
18	Terminal Strength	Tensile Strength	Termination not to be broken or loosened	As in the figure, fix the capacitor body, apply the force gradually to each lead in the radial direction of the capacitor until reaching 10N and then keep the force applied for $10\pm1s$.		
		Bending Strength	Termination not to be broken or loosened	Each lead wire should be subjected to a force of 2.5N and then be bent 90° at the point of egress in one direction. Each wire is then returned to the original position and bent 90° in the opposite direction at the rate of one bend per 2 to 3s.		
	Capacitance 19 Temperature Characteristics			The capacitance change should be measured after 5min at each specified temperature step.		
19			Char. X7R: Within ±15% Char. X7S: Within ±22%	StepTemperature (°C)125±22-55±3325±24125±3525±2The ranges of capacitance change compared with the above25°C value over the temperature ranges shown in the tableshould be within the specified ranges.•PretreatmentPerform the heat treatment at 150+0/-10°C for 60±5minand then let sit for 24±2h at room condition*.Perform the initial measurement.		

* "room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

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T max

ød: 0.5±0.05

(in mm)

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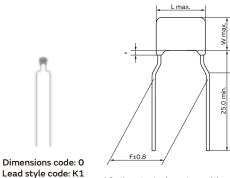
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150°C Operation Leaded MLCC for Automotive

RHE Series (DC25V-DC100V)

Features

- 1. Small size and large capacitance
- 2. Low ESR and ESL suitable for high frequency
- 3. Applied maximum temperature up to 150°C Note: Maximum accumulative time to 150°C
- is within 2000 hours.
- 4. Meet AEC-Q200, ISO7637-2 (surge test) requirement
- 5. Meet LF (Lead Free) and HF (Halogen Free)
- 6. Flow soldering and welding are available. (Re-flow soldering is not available.)
- 7. If copper wire is necessary at welding process, copper wire is available based on request.



Coating extension does not exceed the end of the lead bend. Lead Wire: Solder Coated CP Wire

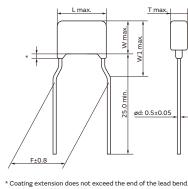


Dimensions code: 1

Lead style code: K1

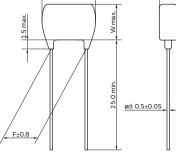
Τm W max W1 ød: 0.5±0.05 F±0.8

* Coating extension does not exceed the end of the lead bend • Lead Wire: Solder Coated CP Wire (in mm)



Dimensions code: 2 Lead style code: K1

* Coating extension does not exceed the end of the lead bend Lead Wire: Solder Coated CP Wire (in mm)



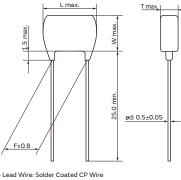
L max

Dimensions code: 0 Lead style code: A2

· Lead Wire: Solder Coated CP Wire

T max



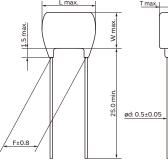


Lead style code: A2

(in mm)

(in mm)



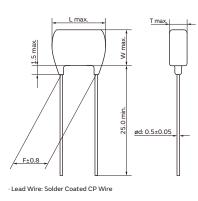


Lead style code: A2

Lead Wire: Solder Coated CP Wire

(in mm)



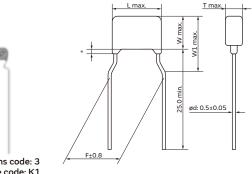


(in mm)

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Dimensions code: 3 Lead style code: K1

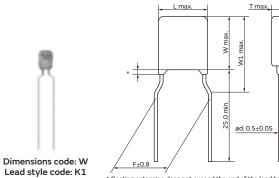
* Coating extension does not exceed the end of the lead bend. • Lead Wire: Solder Coated CP Wire (in mm)

Dimensions

Dimensions and	Dimensions (mm)							
Lead Style Code	L	w	W1	т	F	d		
0A2/0DB	3.6	3.5	-		2.5	0.5		
0K1/0M1	3.6	3.5	6.0		5.0	0.5		
1A2/1DB	4.0	3.5	-		2.5	0.5		
1K1/1M1	4.0	3.5	5.0		5.0	0.5		
2A2/2DB	5.5	4.0	-	See the individual product specification	2.5	0.5		
2K1/2M1	5.5	4.0	6.0	produce specification	5.0	0.5		
3A2/3DB	5.5	5.0	-		2.5	0.5		
3K1/3M1	5.5	5.0	7.5		5.0	0.5		
WK1/WM1	5.5	7.5	10.0		5.0	0.5		

Marking

Туре	Temperature Compensating Type	High Dielectric	Constant Type		
Rated Voltage	DC50V, DC100V	DC25V, DC50V	DC100V		
Dimensions Code Temp. Char.	X8G	X	8L		
0		8	8		
1					
2	-	(H 105 K58	(C 224 K18		
3, W	_	(M 335) K58	_		
Temperature Characteristics	Marked with code (X8G, X8L cha	r.: 8)			
Nominal Capacitance	Marked with 3 figures	Marked with 3 figures			
Capacitance Tolerance	Marked with code				
Rated Voltage	Marked with code (DC25V: 2, DC50V: 5, DC100V: 1) A part is omitted (Please refer to the marking example.)				
Manufacturer's Identification	Marked with ${\mathbb M}$ A part is omitted (Please refer to the marking example.)				



Coating extension does not exceed the end of the lead bend. Lead Wire: Solder Coated CP Wire (in mm)

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Temperature Compensating Type, X8G Characteristics

Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RHE5G1H101J0 H03	X8G (Murata)	50Vdc	100pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H101J0 H03	X8G (Murata)	50Vdc	100pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H121J0_H03	X8G (Murata)	50Vdc	120pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H121J0 H03	X8G (Murata)	50Vdc	120pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H151J0 H03	X8G (Murata)	50Vdc	150pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H151J0 H03	X8G (Murata)	50Vdc	150pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H181J0 H03	X8G (Murata)	50Vdc	180pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H181J0 H03	X8G (Murata)	50Vdc	180pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H221J0 H03	X8G (Murata)	50Vdc	220pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H221J0 H03	X8G (Murata)	50Vdc	220pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H271J0 H03	X8G (Murata)	50Vdc	270pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H271J0 H03	X8G (Murata)	50Vdc	270pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H331J0 H03	X8G (Murata)	50Vdc	330pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H331J0 H03	X8G (Murata)	50Vdc	330pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H391J0 H03	X8G (Murata)	50Vdc	390pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H391J0 H03	X8G (Murata)	50Vdc	390pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H471J0 H03	X8G (Murata)	50Vdc	470pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H471J0 H03	X8G (Murata)	50Vdc	470pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H561J0 H03	X8G (Murata)	50Vdc	560pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H561J0 H03	X8G (Murata)	50Vdc	560pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H681J0 H03	X8G (Murata)	50Vdc	680pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H681J0 H03	X8G (Murata)	50Vdc	680pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H821J0 H03	X8G (Murata)	50Vdc	820pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H821J0 H03	X8G (Murata)	50Vdc	820pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H102J0 H03	X8G (Murata)	50Vdc	1000pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H102J0 H03	X8G (Murata)	50Vdc	1000pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H122J0 H03	X8G (Murata)	50Vdc	1200pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H122J0 H03	X8G (Murata)	50Vdc	1200pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H152J0 H03	X8G (Murata)	50Vdc	1500pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H152J0 H03	X8G (Murata)	50Vdc	1500pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H182J0 H03	X8G (Murata)	50Vdc	1800pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H182J0 H03	X8G (Murata)	50Vdc	1800pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H222J0 H03	X8G (Murata)	50Vdc	2200pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H222J0 H03	X8G (Murata)	50Vdc	2200pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H272J0 H03	X8G (Murata)	50Vdc	2700pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H272J0 H03	X8G (Murata)	50Vdc	2700pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H332J0 H03	X8G (Murata)	50Vdc	3300pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H332J0 H03	X8G (Murata)	50Vdc	3300pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H392J0 H03	X8G (Murata)	50Vdc	3900pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G1H392J0 H03	X8G (Murata)	50Vdc	3900pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G1H472J1	X8G (Murata)	50Vdc	4700pF±5%	4.0×3.5	2.5	2.5	A2	DB M1
RHE5G1H472J1 H03 RHE5G1H562J1 H03	X8G (Murata) X8G (Murata)	50Vdc 50Vdc	4700pF±5% 5600pF±5%	4.0×3.5 4.0×3.5	2.5 2.5	5.0 2.5	K1 A2	 DB
RHE5G1H562J1	. ,	50Vdc		4.0×3.5	2.5	5.0		
RHE5G1H682J1 H03	X8G (Murata) X8G (Murata)	50Vdc 50Vdc	5600pF±5% 6800pF±5%	4.0×3.5 4.0×3.5	2.5	2.5	K1 A2	 DB
RHE5G1H682J1 H03	X8G (Murata)	50Vdc	6800pF±5%	4.0×3.5	2.5	5.0	K1	 M1
RHE5G1H822J1	X8G (Murata)	50Vdc	8200pF±5%	4.0×3.5	2.5	2.5	A2	DB
RHE5G1H822J1 H03	. ,	50Vdc	8200pF±5%	4.0×3.5	2.5	5.0	K1	 M1
RHE5G1H103J1	X8G (Murata)	50Vdc	10000pF±5%	4.0×3.5	2.5	2.5	A2	DB
RHE5G1H103J1	X8G (Murata)	50Vdc	10000pF±5%	4.0×3.5	2.5	5.0	K1	M1
RHE5G2A101J0 H03	X8G (Murata)	100Vdc	100pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G2A101J0 H03	X8G (Murata)	100Vdc	100pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G2A121J0 H03	X8G (Murata)	100Vdc	120pF±5%	3.6×3.5	2.5	2.5	A2	DB
RHE5G2A121J0 H03	X8G (Murata)	100Vdc	120pF±5%	3.6×3.5	2.5	5.0	K1	M1
RHE5G2A151J0 H03	X8G (Murata)	100Vdc	150pF±5%	3.6×3.5	2.5	2.5	A2	DB



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Part Number	Temp.	Rated	Capacitance	Dimensions LxW	Dimension T	Lead Space F	Lead Style Code	Lead Style Code		
	Char.	Voltage		(mm)	(mm)	(mm)	Bulk	Taping		
RHE5G2A151J0	X8G (Murata)	100Vdc	150pF±5%	3.6×3.5	2.5	5.0	K1	M1		
RHE5G2A181J0	X8G (Murata)	100Vdc	180pF±5%	3.6×3.5	2.5	2.5	A2	DB		
RHE5G2A181J0	X8G (Murata)	100Vdc	180pF±5%	3.6×3.5	2.5	5.0	K1	M1		
RHE5G2A221J0 H03	X8G (Murata)	100Vdc	220pF±5%	3.6×3.5	2.5	2.5	A2	DB		
RHE5G2A221J0 H03	X8G (Murata)	100Vdc	220pF±5%	3.6×3.5	2.5	5.0	K1	M1		
RHE5G2A271J0	X8G (Murata)	100Vdc	270pF±5%	3.6×3.5	2.5	2.5	A2	DB		
RHE5G2A271J0	X8G (Murata)	100Vdc	270pF±5%	3.6×3.5	2.5	5.0	K1	M1		
RHE5G2A331J0	X8G (Murata)	100Vdc	330pF±5%	3.6×3.5	2.5	2.5	A2	DB		
RHE5G2A331J0	X8G (Murata)	100Vdc	330pF±5%	3.6×3.5	2.5	5.0	K1	M1		
RHE5G2A391J0	X8G (Murata)	100Vdc	390pF±5%	3.6×3.5	2.5	2.5	A2	DB		
RHE5G2A391J0	X8G (Murata)	100Vdc	390pF±5%	3.6×3.5	2.5	5.0	K1	M1		
RHE5G2A471J0	X8G (Murata)	100Vdc	470pF±5%	3.6×3.5	2.5	2.5	A2	DB		
RHE5G2A471J0	X8G (Murata)	100Vdc	470pF±5%	3.6×3.5	2.5	5.0	K1	M1		
RHE5G2A561J0	X8G (Murata)	100Vdc	560pF±5%	3.6×3.5	2.5	2.5	A2	DB		
RHE5G2A561J0	X8G (Murata)	100Vdc	560pF±5%	3.6×3.5	2.5	5.0	K1	M1		
RHE5G2A681J0	X8G (Murata)	100Vdc	680pF±5%	3.6×3.5	2.5	2.5	A2	DB		
RHE5G2A681J0	X8G (Murata)	100Vdc	680pF±5%	3.6×3.5	2.5	5.0	K1	M1		
RHE5G2A821J0 H03	X8G (Murata)	100Vdc	820pF±5%	3.6×3.5	2.5	2.5	A2	DB		
RHE5G2A821J0 H03	X8G (Murata)	100Vdc	820pF±5%	3.6×3.5	2.5	5.0	K1	M1		
RHE5G2A102J0	X8G (Murata)	100Vdc	1000pF±5%	3.6×3.5	2.5	2.5	A2	DB		
RHE5G2A102J0	X8G (Murata)	100Vdc	1000pF±5%	3.6×3.5	2.5	5.0	K1	M1		
RHE5G2A122J0 H03	X8G (Murata)	100Vdc	1200pF±5%	3.6×3.5	2.5	2.5	A2	DB		
RHE5G2A122J0 H03	X8G (Murata)	100Vdc	1200pF±5%	3.6×3.5	2.5	5.0	K1	M1		
RHE5G2A152J0	X8G (Murata)	100Vdc	1500pF±5%	3.6×3.5	2.5	2.5	A2	DB		
RHE5G2A152J0 H03	X8G (Murata)	100Vdc	1500pF±5%	3.6×3.5	2.5	5.0	K1	M1		
RHE5G2A182J1 H03	X8G (Murata)	100Vdc	1800pF±5%	4.0×3.5	2.5	2.5	A2	DB		
RHE5G2A182J1 H03	X8G (Murata)	100Vdc	1800pF±5%	4.0×3.5	2.5	5.0	K1	M1		
RHE5G2A222J1 H03	X8G (Murata)	100Vdc	2200pF±5%	4.0×3.5	2.5	2.5	A2	DB		
RHE5G2A222J1 H03	X8G (Murata)	100Vdc	2200pF±5%	4.0×3.5	2.5	5.0	K1	M1		
RHE5G2A272J1 H03	X8G (Murata)	100Vdc	2700pF±5%	4.0×3.5	2.5	2.5	A2	DB		
RHE5G2A272J1 H03	X8G (Murata)	100Vdc	2700pF±5%	4.0×3.5	2.5	5.0	K1	M1		
RHE5G2A332J1 H03	X8G (Murata)	100Vdc	3300pF±5%	4.0×3.5	2.5	2.5	A2	DB		
RHE5G2A332J1 H03	X8G (Murata)	100Vdc	3300pF±5%	4.0×3.5	2.5	5.0	K1	M1		

Two blank columns are filled with the lead style code. Please refer to the 3 columns on the right for the appropriate code.

The last blank column is filled with the packaging code. (B: bulk, A: ammo pack)

High Dielectric Constant Type, X8L Characteristics

Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RHEL81E104K0	X8L (Murata)	25Vdc	0.1µF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL81E104K0	X8L (Murata)	25Vdc	0.1µF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL81E154K0 H03	X8L (Murata)	25Vdc	0.15µF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL81E154K0 H03	X8L (Murata)	25Vdc	0.15µF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL81E224K0 H03	X8L (Murata)	25Vdc	0.22µF±10%	3.6×3.5	2.5	2.5	A2	DB
RHEL81E224K0 H03	X8L (Murata)	25Vdc	0.22µF±10%	3.6×3.5	2.5	5.0	K1	M1
RHEL81E334K1 H03	X8L (Murata)	25Vdc	0.33µF±10%	4.0×3.5	2.5	2.5	A2	DB
RHEL81E334K1 H03	X8L (Murata)	25Vdc	0.33µF±10%	4.0×3.5	2.5	5.0	K1	M1
RHEL81E474K1 H03	X8L (Murata)	25Vdc	0.47µF±10%	4.0×3.5	2.5	2.5	A2	DB
RHEL81E474K1 H03	X8L (Murata)	25Vdc	0.47µF±10%	4.0×3.5	2.5	5.0	K1	M1
RHEL81E684K1 H03	X8L (Murata)	25Vdc	0.68µF±10%	4.0×3.5	2.5	2.5	A2	DB
RHEL81E684K1 H03	X8L (Murata)	25Vdc	0.68µF±10%	4.0×3.5	2.5	5.0	K1	M1
RHEL81E105K1 H03	X8L (Murata)	25Vdc	1.0µF±10%	4.0×3.5	2.5	2.5	A2	DB
RHEL81E105K1	X8L (Murata)	25Vdc	1.0µF±10%	4.0×3.5	2.5	5.0	K1	M1
RHEL81E155K2 H03	X8L (Murata)	25Vdc	1.5µF±10%	5.5×4.0	3.15	2.5	A2	DB
RHEL81E155K2 H03	X8L (Murata)	25Vdc	1.5µF±10%	5.5×4.0	3.15	5.0	K1	M1
RHEL81E225K2 H03	X8L (Murata)	25Vdc	2.2µF±10%	5.5×4.0	3.15	2.5	A2	DB

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping	
RHEL81E225K2	X8L (Murata)	25Vdc	2.2µF±10%	5.5×4.0	3.15	5.0	K1	M1	
RHEL81E335K2 H03	X8L (Murata)	25Vdc	3.3µF±10%	5.5×4.0	3.15	2.5	A2	DB	
RHEL81E335K2 H03	X8L (Murata)	25Vdc	3.3µF±10%	5.5×4.0	3.15	5.0	K1	M1	
RHEL81E475K2 H03	X8L (Murata)	25Vdc	4.7µF±10%	5.5×4.0	3.15	2.5	A2	DB	
RHEL81E475K2 H03	X8L (Murata)	25Vdc	4.7µF±10%	5.5×4.0	3.15	5.0	K1	M1	
RHEL81E106K3	X8L (Murata)	25Vdc	10µF±10%	5.5×5.0	4.0	2.5	A2	DB	
RHEL81E106K3	X8L (Murata)	25Vdc	10µF±10%	5.5×5.0	4.0	5.0	K1	M1	
RHEL81E226MW H03	X8L (Murata)	25Vdc	22µF±20%	5.5×7.5	4.0	5.0	K1	M1	
RHEL81H221K0 H03	X8L (Murata)	50Vdc	220pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL81H221K0 H03	X8L (Murata)	50Vdc	220pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL81H331K0 H03	X8L (Murata)	50Vdc	330pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL81H331K0 H03	X8L (Murata)	50Vdc	330pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL81H471K0	X8L (Murata)	50Vdc	470pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL81H471K0	X8L (Murata)	50Vdc	470pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL81H681K0	X8L (Murata)	50Vdc	680pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL81H681K0 H03	X8L (Murata)	50Vdc	680pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL81H102K0 H03	X8L (Murata)	50Vdc	1000pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL81H102K0 H03	X8L (Murata)	50Vdc	1000pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL81H152K0 H03	X8L (Murata)	50Vdc	1500pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL81H152K0 H03	X8L (Murata)	50Vdc	1500pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL81H222K0 H03	X8L (Murata)	50Vdc	2200pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL81H222K0 H03	X8L (Murata)	50Vdc	2200pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL81H332K0 H03	X8L (Murata)	50Vdc	3300pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL81H332K0 H03	X8L (Murata)	50Vdc	3300pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL81H472K0 H03	X8L (Murata)	50Vdc	4700pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL81H472K0 H03	X8L (Murata)	50Vdc	4700pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL81H682K0 H03	X8L (Murata)	50Vdc	6800pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL81H682K0 H03	X8L (Murata)	50Vdc	6800pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL81H103K0 H03	X8L (Murata)	50Vdc	10000pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL81H103K0 H03	X8L (Murata)	50Vdc	10000pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL81H153K0 H03	X8L (Murata)	50Vdc	15000pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL81H153K0	X8L (Murata)	50Vdc	15000pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL81H223K0 H03	X8L (Murata)	50Vdc	22000pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL81H223K0 H03	X8L (Murata)	50Vdc	22000pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL81H333K0 H03	X8L (Murata)	50Vdc	33000pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL81H333K0 H03	X8L (Murata)	50Vdc	33000pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL81H473K0 H03	X8L (Murata)	50Vdc	47000pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL81H473K0	X8L (Murata)	50Vdc	47000pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL81H683K0	X8L (Murata)	50Vdc	68000pF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL81H683K0	X8L (Murata)	50Vdc	68000pF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL81H104K0	X8L (Murata)	50Vdc	0.10µF±10%	3.6×3.5	2.5	2.5	A2	DB	
RHEL81H104K0 H03	X8L (Murata)	50Vdc	0.10µF±10%	3.6×3.5	2.5	5.0	K1	M1	
RHEL81H154K1	X8L (Murata)	50Vdc	0.15µF±10%	4.0×3.5	2.5	2.5	A2	DB	
RHEL81H154K1	X8L (Murata)	50Vdc	0.15µF±10%	4.0×3.5	2.5	5.0	K1	M1	
	X8L (Murata)	50Vdc	0.22µF±10%	4.0×3.5	2.5	2.5	A2	DB	
	X8L (Murata)	50Vdc	0.22µF±10%	4.0×3.5	2.5	5.0	K1	M1	
	X8L (Murata)	50Vdc	0.33µF±10%	4.0×3.5	2.5	2.5	A2	DB M1	
	X8L (Murata)	50Vdc	0.33µF±10%	4.0×3.5	2.5	5.0	K1	M1	
RHEL81H474K2 H03	X8L (Murata)	50Vdc	0.47µF±10%	5.5×4.0	3.15	2.5	A2	DB M1	
RHEL81H474K2 H03	X8L (Murata)	50Vdc	0.47µF±10%	5.5×4.0	3.15	5.0	K1	M1 DB	
	X8L (Murata)	50Vdc 50Vdc	0.68µF±10%	5.5×4.0	3.15	2.5	A2	DB M1	
RHEL81H684K2 H03	X8L (Murata)	50Vdc	0.68µF±10% 1.0µF±10%	5.5×4.0	3.15 3.15	5.0 2.5	K1 A2	DB	
RHEL81H105K2 H03	X8L (Murata)	50Vdc		5.5×4.0	3.15	5.0		M1	
RHEL81H105K2 H03 RHEL81H155K2 H03	X8L (Murata) X8L (Murata)	50Vdc	1.0μF±10% 1.5μF±10%	5.5×4.0 5.5×4.0	3.15	2.5	K1 A2	DB	
RHEL81H155K2H03_	X8L (Murata) X8L (Murata)	50Vdc	1.5µF±10% 1.5µF±10%	5.5×4.0 5.5×4.0	3.15	5.0	K1	M1	
RHEL81H135K2H03	X8L (Murata)	50Vdc	2.2μF±10%	5.5×4.0	3.15	2.5	A2	DB	
		50 vac	2.2µ1 ±10 %	5.5^4.0	5.15				

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping		
RHEL81H225K2	X8L (Murata)	50Vdc	2.2µF±10%	5.5×4.0	3.15	5.0	K1	M1		
RHEL81H335K3	X8L (Murata)	50Vdc	3.3µF±10%	5.5×5.0	4.0	2.5	A2	DB		
RHEL81H335K3	X8L (Murata)	50Vdc	3.3µF±10%	5.5×5.0	4.0	5.0	K1	M1		
RHEL81H475K3 H03	X8L (Murata)	50Vdc	4.7µF±10%	5.5×5.0	4.0	2.5	A2	DB		
RHEL81H475K3 H03	X8L (Murata)	50Vdc	4.7µF±10%	5.5×5.0	4.0	5.0	K1	M1		
RHEL81H106MW H03	X8L (Murata)	50Vdc	10µF±20%	5.5×7.5	4.0	5.0	K1	M1		
RHEL82A221K0 H03	X8L (Murata)	100Vdc	220pF±10%	3.6×3.5	2.5	2.5	A2	DB		
RHEL82A221K0 H03	X8L (Murata)	100Vdc	220pF±10%	3.6×3.5	2.5	5.0	K1	M1		
RHEL82A331K0 H03	X8L (Murata)	100Vdc	330pF±10%	3.6×3.5	2.5	2.5	A2	DB		
RHEL82A331K0 H03	X8L (Murata)	100Vdc	330pF±10%	3.6×3.5	2.5	5.0	K1	M1		
RHEL82A471K0 H03	X8L (Murata)	100Vdc	470pF±10%	3.6×3.5	2.5	2.5	A2	DB		
RHEL82A471K0 H03	X8L (Murata)	100Vdc	470pF±10%	3.6×3.5	2.5	5.0	K1	M1		
RHEL82A681K0 H03	X8L (Murata)	100Vdc	680pF±10%	3.6×3.5	2.5	2.5	A2	DB		
RHEL82A681K0 H03	X8L (Murata)	100Vdc	680pF±10%	3.6×3.5	2.5	5.0	K1	M1		
RHEL82A102K0 H03	X8L (Murata)	100Vdc	1000pF±10%	3.6×3.5	2.5	2.5	A2	DB		
RHEL82A102K0 H03	X8L (Murata)	100Vdc	1000pF±10%	3.6×3.5	2.5	5.0	K1	M1		
RHEL82A152K0 H03	X8L (Murata)	100Vdc	1500pF±10%	3.6×3.5	2.5	2.5	A2	DB		
RHEL82A152K0 H03	X8L (Murata)	100Vdc	1500pF±10%	3.6×3.5	2.5	5.0	K1	M1		
RHEL82A222K0 H03	X8L (Murata)	100Vdc	2200pF±10%	3.6×3.5	2.5	2.5	A2	DB		
RHEL82A222K0 H03	X8L (Murata)	100Vdc	2200pF±10%	3.6×3.5	2.5	5.0	K1	M1		
RHEL82A332K0 H03	X8L (Murata)	100Vdc	3300pF±10%	3.6×3.5	2.5	2.5	A2	DB		
RHEL82A332K0 H03	X8L (Murata)	100Vdc	3300pF±10%	3.6×3.5	2.5	5.0	K1	M1		
RHEL82A472K0 H03	X8L (Murata)	100Vdc	4700pF±10%	3.6×3.5	2.5	2.5	A2	DB		
RHEL82A472K0 H03	X8L (Murata)	100Vdc	4700pF±10%	3.6×3.5	2.5	5.0	K1	M1		
RHEL82A682K0 H03	X8L (Murata)	100Vdc	6800pF±10%	3.6×3.5	2.5	2.5	A2	DB		
RHEL82A682K0 H03	X8L (Murata)	100Vdc	6800pF±10%	3.6×3.5	2.5	5.0	K1	M1		
RHEL82A103K0 H03	X8L (Murata)	100Vdc	10000pF±10%	3.6×3.5	2.5	2.5	A2	DB		
RHEL82A103K0 H03	X8L (Murata)	100Vdc	10000pF±10%	3.6×3.5	2.5	5.0	K1	M1		
RHEL82A153K0 H03	X8L (Murata)	100Vdc	15000pF±10%	3.6×3.5	2.5	2.5	A2	DB		
RHEL82A153K0 H03	X8L (Murata)	100Vdc	15000pF±10%	3.6×3.5	2.5	5.0	K1	M1		
RHEL82A223K0 H03	X8L (Murata)	100Vdc	22000pF±10%	3.6×3.5	2.5	2.5	A2	DB		
RHEL82A223K0 H03	X8L (Murata)	100Vdc	22000pF±10%	3.6×3.5	2.5	5.0	K1	M1		
RHEL82A333K1 H03	X8L (Murata)	100Vdc	33000pF±10%	4.0×3.5	2.5	2.5	A2	DB		
RHEL82A333K1 H03	X8L (Murata)	100Vdc	33000pF±10%	4.0×3.5	2.5	5.0	K1	M1		
RHEL82A473K1 H03	X8L (Murata)	100Vdc	47000pF±10%	4.0×3.5	2.5	2.5	A2	DB		
RHEL82A473K1 H03	X8L (Murata)	100Vdc	47000pF±10%	4.0×3.5	2.5	5.0	K1	M1		
RHEL82A683K1 H03	X8L (Murata)	100Vdc	68000pF±10%	4.0×3.5	2.5	2.5	A2	DB		
RHEL82A683K1	X8L (Murata)	100Vdc	68000pF±10%	4.0×3.5	2.5	5.0	K1	M1		
RHEL82A104K1	X8L (Murata)	100Vdc	0.10µF±10%	4.0×3.5	2.5	2.5	A2	DB		
RHEL82A104K1	X8L (Murata)	100Vdc	0.10µF±10%	4.0×3.5	2.5	5.0	K1	M1		
RHEL82A154K2	X8L (Murata)	100Vdc	0.15µF±10%	5.5×4.0	3.15	2.5	A2	DB		
RHEL82A154K2	X8L (Murata)	100Vdc	0.15µF±10%	5.5×4.0	3.15	5.0	K1	M1		
RHEL82A224K2 H03	X8L (Murata)	100Vdc	0.22µF±10%	5.5×4.0	3.15	2.5	A2	DB		
RHEL82A224K2	X8L (Murata)	100Vdc	0.22µF±10%	5.5×4.0	3.15	5.0	K1	M1		

Two blank columns are filled with the lead style code. Please refer to the 3 columns on the right for the appropriate code.

The last blank column is filled with the packaging code. (B: bulk, A: ammo pack)

C49E.pdf Nov. 19,2019

Specifications and Test Methods

			Specif	ication				
No.	AEC-Q200) Test Item	Temperature Compensating Type (Char. X8G)	High Dielectric Constant Type (Char. X8L)	AEC-Q200 Test Method			
1	Pre-and Post-Stress Electrical Test				-			
	High Tem Exposure	perature (Storage)	The measured and observed cha specifications in the following ta	,				
		Appearance	No defects or abnormalities		Sit the capacitor for 1000±12h at 150±3°C. Let sit for 24±2h at room condition*, then measure.			
2		Capacitance Change	Within ±3% or ±0.3pF (Whichever is larger)	Within ±12.5%	•Pretreatment Perform the heat treatment at 150+0/-10°C for 60±5min and			
		Q/D.F.	Q ≧ 350	0.04 max.	then let sit for 24±2h at room condition*. (for Char. X8L)			
		I.R.	More than 1000M Ω or 50M Ω - μ	uF (Whichever is smaller)				
	Temperat Cycling	ture	The measured and observed cha specifications in the following ta		Perform the 1000 cycles according to the four heat treatments listed in the following table. Let sit for 24±2h at room			
		Appearance	No defects or abnormalities exc coating	cept color change of outer	condition*, then measure. Step 1 2 3 4			
3		Capacitance Change	Within ±5% or ±0.5pF (Whichever is larger)	Within ±12.5%	Temp. (°C) -55+0/-3 Room Temp. 150+3/-0 Room Temp. Time (min) 15±3 1 15±3 1			
		Q/D.F.	Q ≧ 350	0.05 max.	•Pretreatment Perform the heat treatment at 150+0/-10°C for 60±5min and			
		I.R.	1000MΩ or 50MΩ • μF min. (Wh	nichever is smaller)	then let sit for 24±2h at room condition*. (for Char. X8L)			
	Moisture Resistanc	e	The measured and observed cha specifications in the following ta		Apply the 24h heat (25 to 65°C) and humidity (80 to 98%) treatment shown below, 10 consecutive times.			
		Appearance	No defects or abnormalities		Let sit for 24±2h at room condition*, then measure. •Pretreatment			
		Capacitance Change	Within ±5% or ±0.5pF (Whichever is larger)	Within ±12.5%	Perform the heat treatment at 150+0/-10°C for 60±5min and then let sit for 24±2h at room condition*. (for Char. X8L)			
		Q/D.F.	Q ≧ 200	0.05 max.	Humidity Humidity Humidity Humidity Humidity (°C) 90-98% 80-98% 90-98% 90-98% 70			
4		I.R.	500MΩ or 25MΩ • μF min. (Whi	chever is smaller)	65 55 55 55 55 55 55 55 55 55			
	Biased Hu	ased Humidity The measured and observed characteristics should satisfy the specifications in the following table.			Apply the rated voltage and DC1.3+0.2/-0V (add 100kΩ resisto at 85±3°C and 80 to 85% humidity for 1000±12h.			
		Appearance	No defects or abnormalities		Remove and let sit for 24±2h at room condition*, then measure.			
5		Capacitance Change	Within ±5% or ±0.5pF (Whichever is larger)	Within ±12.5%	The charge/discharge current is less than 50mA. •Pretreatment			
		Q/D.F.	Q ≧ 200	0.05 max.	Perform the heat treatment at 150+0/-10°C for 60±5min and			
		I.R.	500MΩ or 25MΩ • μ F min. (Whi	chever is smaller)	then let sit for 24±2h at room condition*. (for Char. X8L)			
	Operatior	nal Life	The measured and observed cha specifications in the following ta		Apply 150% of the rated voltage for 1000±12h at 150±3°C.			
		Appearance	No defects or abnormalities exc coating	cept color change of outer	Let sit for 24±2h at room condition*, then measure. The charge/discharge current is less than 50mA.			
		Capacitance Change	Within ±3% or ±0.3pF (Whichever is larger)	Within ±12.5%	 Pretreatment Apply test voltage for 60±5 min at test temperature. 			
6			Q ≧ 350	0.04 max.	Remove and let sit for 24±2h at room condition*. (for Char. X8L)			
6		Q/D.F.	$Q \leq 350$ 0.04 max. 1000M Ω or 50M $\Omega \cdot \mu$ F min. (Whichever is smaller)					
6		Q/D.F. I.R.	1000MΩ or 50MΩ • μF min. (Wh	nichever is smaller)				
6 7	External	I.R.	1000MΩ or 50MΩ • μF min. (Wh No defects or abnormalities	nichever is smaller)	Visual inspection			
		I.R.						

* "room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

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Specifications and Test Methods

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	No. AEC-Q200 Test Item		Specif	ication	AEC-Q200 Test Method				
No.			Temperature Compensating Type (Char. X8G)	High Dielectric Constant Type (Char. X8L)					
	Appearance		No defects or abnormalities		Per MIL-STD-202 Method 215				
		Capacitance	Within the specified tolerance		Solvent 1: 1 part (by volume) of isopropyl alcohol 3 parts (by volume) of mineral spirits				
10	Resistance	Q/D.F.	Q ≧ 1000	0.025 max.	Solvent 2: Terpene defluxer				
10	to Solvents	I.R.	More than 10000MΩ or 500MΩ	2 • μF (Whichever is smaller)	Solvent 3: 42 parts (by volume) of water 1 part (by volume) of propylene glycol monomethyl ether 1 part (by volume) of monoethanolamine				
		Appearance	No defects or abnormalities		Three shocks in each direction should be applied along 3				
	Mechanical	Capacitance	Within the specified tolerance		mutually perpendicular axes of the test specimen (18 shocks).				
11	Shock	Q/D.F.	Q≧1000	0.025 max.	The specified test pulse should be Half-sine and should have a duration: 0.5ms, peak value: 1500G and velocity change: 4.7m/s.				
		Appearance	No defects or abnormalities		The capacitor should be subjected to a simple harmonic motion				
		Capacitance	Within the specified tolerance		having a total amplitude of 1.5mm, the frequency being varied				
12	Vibration	Q/D.F.	Q ≧ 1000	0.025 max.	uniformly between the approximate limits of 10 and 2000Hz. The frequency range, from 10 to 2000Hz and return to 10Hz, should be traversed in approximately 20min. This motion should be applied for 12 items in each 3 mutually perpendicula directions (total of 36 times).				
	Resistance Soldering H		The measured and observed characteristic specifications in the following ta		The lead wires should be immersed in the melted solder 1.5 to				
	(Non-Preheat)	Appearance	No defects or abnormalities		2.0mm from the root of terminal at 260±5°C for 10±1s. Pre-treatment Capacitor should be stored at 150+0/-10°C for 1h, then place at room temperature for 24±2h before initial measurement. (For Char. X8L) Post-treatment Capacitor should be stored for 24±2h at room condition*.				
13		Capacitance Change	Within ±2.5% or ±0.25pF (Whichever is larger)	Within ±7.5%					
1		Dielectric Strength (Between Terminals)	No defects	1					
	Resistance Soldering H		The measured and observed chaspecifications in the following ta		First the capacitor should be stored at 120+0/-5°C for 60+0/-5s.				
	(On-Preheat)	Appearance	No defects or abnormalities		Then, the lead wires should be immersed in the melted solder 1.5 to 2.0mm from the root of terminal at 260±5°C for 7.5+0/-1s.				
13 '		Capacitance Change	Within ±2.5% or ±0.25pF (Whichever is larger)	Within ±7.5%	Pre-treatment Capacitor should be stored at 150+0/-10°C for 1h, then place				
2		Dielectric Strength (Between Terminals)	No defects		 at room temperature for 24±2h before initial measurement. (Fo Char. X8L) Post-treatment Capacitor should be stored for 24±2h at room condition*. 				
	Resistance Soldering H		The measured and observed cha specifications in the following ta		Test condition Temperature of iron-tip: 350±10°C				
	(Soldering Iron Method)	Appearance No defects or abnormalities			Soldering time: 3.5±0.5s.				
13	non Method)	Capacitance Change	Within ±2.5% or ±0.25pF (Whichever is larger)	Within ±7.5%	Soldering position Straight Lead: 1.5 to 2.0mm from the root of terminal. Crimp Lead: 1.5 to 2.0mm from the end of lead bend.				
3		Dielectric Strength (Between Terminals)	No defects		Pre-treatment Capacitor should be stored at 150+0/-10°C for 1h, then place at room temperature for 24±2h before initial measurement. (For Char. X8L) Post-treatment Capacitor should be stored for 24±2h at room condition*.				
	Thermal S	Shock	The measured and observed characteristic and observed characteristic at the following ta		Perform the 300 cycles according to the two heat treatments listed in the following table (Maximum transfer time is 20s).				
		Appearance	No defects or abnormalities		Let sit for 24±2h at room condition*, then measure.				
14		Capacitance Change	Within ±5% or ±0.5pF (Whichever is larger)	Within ±12.5%	Step 1 2 Temp. (°C) -55+0/-3 150+3/-0 Time (min) 15±3 15±3				
		Q/D.F.	Q ≧ 350	0.05 max.	Time (min) 15±3 15±3 15±3				
		I.R.	1000MΩ or 50MΩ • μF min. (Wh	nichever is smaller)	 Pretreatment Perform the heat treatment at 150+0/-10°C for 60±5min and then let sit for 24±2h at room condition*. (for Char. X8L) 				
		Appearance	No defects or abnormalities						
		Capacitance	Within the specified tolerance		1				
15	ESD	Q/D.F.	Q ≧ 1000	0.025 max.	Per AEC-Q200-002				
		I.R.	More than 10000M Ω or 500M Ω	Ω • μF (Whichever is smaller)					

* "room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

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Specifications and Test Methods

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				Specif	ication				
No.	AEC-Q200) Test Item		mpensating Type . X8G)	High Dielectric Constant Type (Char. X8L)	AEC-Q200 Test Method			
16	Solderabi	lity			ith uniform coating on the axial nferential direction.	The terminal of a capacitor is dipped into a solution of ethanol (JIS-K-8101) and rosin (JIS-K-5902) (25% rosin in weight propotion) and then into molten solder (JIS-Z-3282) for 2±0.5s. In both cases the depth of dipping is up to about 1.5 to 2mm from the terminal body. Temp. of solder: 245±5°C Lead Free Solder (Sn-3.0Ag-0.5Cu)			
		Appearance	No defects or a	hnormalities		235±5°C H60A or H63 Visual inspection	SA Eulectic Solo		
		Capacitance		cified tolerance		The capacitance, Q/D.F.	should be mea	sured at 25°C at the	
		oupacitance	Within the spec			frequency and voltage s			
		Q/D.F.	Q ≧ 1000		0.025 max.	0.025 max. D.025 max. C ≦ 1000pF 10µF ≧ C > 1000pF C > 10µF		Voltage AC0.5 to 5V (r.m.s.) AC1±0.2V (r.m.s.) AC0.5±0.1V (r.m.s.)	
		Insulation Resistance	Room Temperature	10000MΩ or 5 (Whichever is s	 00MΩ • μF min. maller)	The insulation resistanc DC voltage not exceedir temperature and humid (Charge/Discharge curre	ng the rated vol ity and within 2	0	
17	Electrical Charac- terization	(I.R.)	High Temperature	100MΩ or 5MΩ (Whichever is s	•	The insulation resistanc a DC voltage not exceed temperature and humid (Charge/Discharge curre	0		
			Between Terminals	No defects or a	bnormalities	The capacitor should not be damaged when DC voltage of 300% of the rated voltage (for Char. X8G) or DC voltage of 250% of the rated voltage (for Char. X8L) is applied between the terminations for 1 to 5s. (Charge/Discharge current ≦ 50mA.)			
		Dielectric Strength	Body Insulation	No defects or a	bnormalities	The capacitor is placed with metal balls of 1mm that each terminal, shor approximately 2mm fro 250% of the rated DC v impressed for 1 to 5s be capacitor terminals and (Charge/Discharge curre	n diameter so t-circuit is kept m the balls, and oltage is etween metal balls.	XX	
18	Terminal Strength	Tensile Strength	Termination not to be broken or loosened			As in the figure, fix the capacitor body, apply the force gradually to each lead in the radial direction of the capacitor until reaching 10N and then keep the force applied for 10±1s.			
	Strength	Bending Strength	Termination no	t to be broken or	loosened	Each lead wire should be subjected to a force of 2.5N and then be bent 90° at the point of egress in one direction. Each wire is then returned to the original position and bent 90° in the opposite direction at the rate of one bend per 2 to 3s.			
19	Capacitance 19 Temperature Characteristics		X8G 25 to 0±30 -55 to	erature Coefficient 150°C: ppm/°C o 25°C: /-72ppm/°C	Within ±15% (Temp. Range: -55 to +125°C) Within +15/-40% (Temp. Range: +125 to +150°C)	The capacitance change should be measured after 5min at specified temperature step. Step Temperature (°C) 1 25±2 2 -55±3 3 25±2 4 150±3 5 25±2 The temperature coefficient or the ranges of capacitance change is determined using the capacitance measured in step 3 as a reference. •Pretreatment Perform the heat treatment at 150+0/-10°C for 60±5 min the net sit for 24±2h at room condition*. Perform the initial measurement. (for Char. X8L)			

* "room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

muRata

200°C Operation Leaded MLCC for Automotive

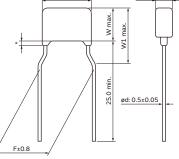
RHS Series (DC100V-DC500V)

Features

- 1. Small size and large capacitance
- 2. Low ESR and ESL suitable for high frequency
- 3. Applied maximum temperature up to 200°C Note: Maximum accumulative time is within 2000 hours.
- 4. Meet AEC-Q200, ISO7637-2 (surge test) requirement
- 5. Meet LF (Lead Free) and HF (Halogen Free)
- 6. Flow soldering and welding are available. (Re-flow soldering is not available.)
- 7. If copper wire is necessary at welding process, copper wire is available based on request.

Lead Wire: Solder Coated CP Wire



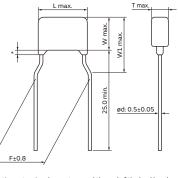


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Dimension code: 0 Lead style code: K1

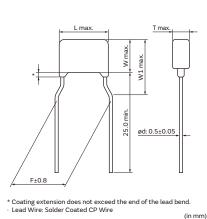
Dimension code: 1

Lead style code: K1



* Coating extension does not exceed the end of the lead bend. • Lead Wire: Solder Coated CP Wire (in mm)



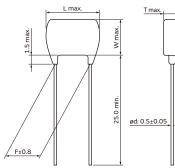


Coating extension does not exceed the end of the lead bend. (in mm)

Dimension code: 1 Lead style code: A2

Dimension code: 0

Lead style code: A2



L max

F±0.

· Lead Wire: Solder Coated CP Wire

T max

ød: 0.5±0.05

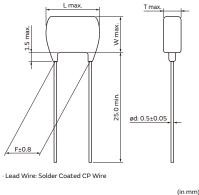
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Lead Wire: Solder Coated CP Wire

(in mm)

(in mm)

Dimension code: 2 Lead style code: A2



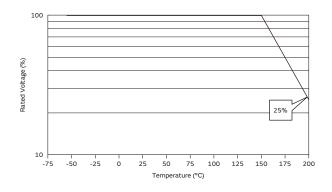


Dimensions and	Dimensions (mm)							
Lead Style Code	L	w	W1	Т	F	d		
0A2/0DG	3.9	3.5	-		2.5	0.5		
0K1/0M2	3.9	3.5	6.0		5.0	0.5		
1A2/1DG	4.2	3.5	-	See the individual	2.5	0.5		
1K1/1M2	4.2	3.5	5.0	product specification	5.0	0.5		
2A2/2DG	5.5	4.0	-		2.5	0.5		
2K1/2M1	5.5	4.0	6.0		5.0	0.5		



Rated Voltage

When the product temperature exceeds 150°C, please use this product within the voltage and temperature derated conditions in the figure below. Maximum operating temperature



Marking

Rated Voltage	DC1	00V	DC200V	DC500V	
Dimension Code Temp. Char.	CCG	X9Q	UI	LUN	
0		(N)	_	_	
1		\ <u>103K</u>		_	
2	_	(CM 224 K1N)	(C+ 103 J62	(CM 101 J92)	
Temperature Characteristics	Marked with code (CCG Cf	nar.: 4, UNJ Char.: 2, X9Q Ch	ar.: N)	<u> </u>	
Nominal Capacitance	Marked with 3 figures				
Capacitance Tolerance	Marked with code				
Rated Voltage	Marked with code (DC100V: 1, DC200V: 6, DC500V: 9) Apart is omitted (Please refer to the marking example.)				
Manufacturer's Identification	Marked with M A part is omitted (Please refer to the marking example.)				

Temperature Compensating Type, CCG/UNJ Characteristics

Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RHS7G2A101J0	CCG (Murata)	100Vdc	100pF±5%	3.9×3.5	2.6	2.5	A2	DG
RHS7G2A101J0	CCG (Murata)	100Vdc	100pF±5%	3.9×3.5	2.6	5.0	K1	M2
RHS7G2A121J0 H01	CCG (Murata)	100Vdc	120pF±5%	3.9×3.5	2.6	2.5	A2	DG
RHS7G2A121J0	CCG (Murata)	100Vdc	120pF±5%	3.9×3.5	2.6	5.0	K1	M2
RHS7G2A151J0	CCG (Murata)	100Vdc	150pF±5%	3.9×3.5	2.6	2.5	A2	DG
RHS7G2A151J0	CCG (Murata)	100Vdc	150pF±5%	3.9×3.5	2.6	5.0	K1	M2
RHS7G2A181J0	CCG (Murata)	100Vdc	180pF±5%	3.9×3.5	2.6	2.5	A2	DG
RHS7G2A181J0	CCG (Murata)	100Vdc	180pF±5%	3.9×3.5	2.6	5.0	K1	M2
RHS7G2A221J0 H01	CCG (Murata)	100Vdc	220pF±5%	3.9×3.5	2.6	2.5	A2	DG
RHS7G2A221J0 H01	CCG (Murata)	100Vdc	220pF±5%	3.9×3.5	2.6	5.0	K1	M2
RHS7G2A271J0 H01	CCG (Murata)	100Vdc	270pF±5%	3.9×3.5	2.6	2.5	A2	DG
RHS7G2A271J0 H01	CCG (Murata)	100Vdc	270pF±5%	3.9×3.5	2.6	5.0	K1	M2
RHS7G2A331J0 H01	CCG (Murata)	100Vdc	330pF±5%	3.9×3.5	2.6	2.5	A2	DG
RHS7G2A331J0	CCG (Murata)	100Vdc	330pF±5%	3.9×3.5	2.6	5.0	K1	M2



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Part Number	Temp.	Rated	Capacitance	Dimensions LxW	Dimension T	Lead Space F	Lead Style Code	Lead Style Code		
	Char.	Voltage	200-5-5%	(mm)	(mm)	(mm)	Bulk	Taping		
RHS7G2A391J0 H01	CCG (Murata)	100Vdc	390pF±5%	3.9×3.5	2.6	2.5	A2	DG		
RHS7G2A391J0 H01	CCG (Murata)	100Vdc 100Vdc	390pF±5%	3.9×3.5	2.6	5.0	K1	M2		
RHS7G2A471J0 H01	CCG (Murata)		470pF±5%	3.9×3.5	2.6	2.5	A2	DG		
RHS7G2A471J0 H01	CCG (Murata)	100Vdc 100Vdc	470pF±5%	3.9×3.5	2.6	5.0	K1	M2		
RHS7G2A561J0 H01 RHS7G2A561J0 H01	CCG (Murata)	100Vdc 100Vdc	560pF±5%	3.9×3.5 3.9×3.5	2.6 2.6	2.5 5.0	A2 K1	DG M2		
RHS7G2A681J0	CCG (Murata)	100Vdc 100Vdc	560pF±5% 680pF±5%	3.9×3.5 3.9×3.5	2.6	2.5	A2	DG		
RHS7G2A681J0H01_	CCG (Murata) CCG (Murata)	100Vdc 100Vdc		3.9×3.5	2.6	5.0	K1	M2		
RHS7G2A881J0 H01	CCG (Murata)	100Vdc 100Vdc	680pF±5% 820pF±5%	3.9×3.5	2.6	2.5	A2	DG		
RHS7G2A821J0 H01	CCG (Murata)	100Vdc	820pF±5%	3.9×3.5	2.6	5.0	K1	M2		
RHS7G2A102J0 H01	CCG (Murata)	100Vdc	1000pF±5%	3.9×3.5	2.6	2.5	A2	DG		
RHS7G2A102J0 H01	CCG (Murata)	100Vdc	1000pF±5%	3.9×3.5	2.6	5.0	K1	M2		
RHS7G2A152J0 H01	CCG (Murata)	100Vdc	1500pF±5%	3.9×3.5	2.6	2.5	A2	DG		
RHS7G2A152J0 H01	CCG (Murata)	100Vdc	1500pF±5%	3.9×3.5	2.6	5.0	K1	M2		
RHS7G2A222J1 H01	CCG (Murata)	100Vdc	2200pF±5%	4.2×3.5	2.8	2.5	A2	DG		
RHS7G2A222J1 H01	CCG (Murata)	100Vdc	2200pF±5%	4.2×3.5	2.8	5.0	K1	M2		
RHS7G2A272J1 H01	CCG (Murata)	100Vdc	2700pF±5%	4.2×3.5	2.8	2.5	A2	DG		
RHS7G2A272J1 H01	CCG (Murata)	100Vdc	2700pF±5%	4.2×3.5	2.8	5.0	K1	M2		
RHS7G2A332J1 H01	CCG (Murata)	100Vdc	3300pF±5%	4.2×3.5	2.8	2.5	A2	DG		
RHS7G2A332J1 H01	CCG (Murata)	100Vdc	3300pF±5%	4.2×3.5	2.8	5.0	K1	M2		
RHS7J2D101J1	UNJ (Murata)	200Vdc	100pF±5%	4.2×3.5	2.8	2.5	A2	DG		
RHS7J2D101J1 H01	UNJ (Murata)	200Vdc	100pF±5%	4.2×3.5	2.8	5.0	K1	M2		
RHS7J2D151J1 H01	UNJ (Murata)	200Vdc	150pF±5%	4.2×3.5	2.8	2.5	A2	DG		
RHS7J2D151J1 H01	UNJ (Murata)	200Vdc	150pF±5%	4.2×3.5	2.8	5.0	K1	M2		
RHS7J2D221J1 H01	UNJ (Murata)	200Vdc	220pF±5%	4.2×3.5	2.8	2.5	A2	DG		
RHS7J2D221J1 H01	UNJ (Murata)	200Vdc	220pF±5%	4.2×3.5	2.8	5.0	K1	M2		
RHS7J2D331J1 H01	UNJ (Murata)	200Vdc	330pF±5%	4.2×3.5	2.8	2.5	A2	DG		
RHS7J2D331J1 H01	UNJ (Murata)	200Vdc	330pF±5%	4.2×3.5	2.8	5.0	K1	M2		
RHS7J2D471J1 H01	UNJ (Murata)	200Vdc	470pF±5%	4.2×3.5	2.8	2.5	A2	DG		
RHS7J2D471J1 H01	UNJ (Murata)	200Vdc	470pF±5%	4.2×3.5	2.8	5.0	K1	M2		
RHS7J2D681J1 H01	UNJ (Murata)	200Vdc	680pF±5%	4.2×3.5	2.8	2.5	A2	DG		
RHS7J2D681J1 H01	UNJ (Murata)	200Vdc	680pF±5%	4.2×3.5	2.8	5.0	K1	M2		
RHS7J2D102J1 H01	UNJ (Murata)	200Vdc	1000pF±5%	4.2×3.5	2.8	2.5	A2	DG		
RHS7J2D102J1 H01	UNJ (Murata)	200Vdc	1000pF±5%	4.2×3.5	2.8	5.0	K1	M2		
RHS7J2D152J1 H01	UNJ (Murata)	200Vdc	1500pF±5%	4.2×3.5	2.8	2.5	A2	DG		
RHS7J2D152J1	UNJ (Murata)	200Vdc	1500pF±5%	4.2×3.5	2.8	5.0	K1	M2		
RHS7J2D222J1 H01	UNJ (Murata)	200Vdc	2200pF±5%	4.2×3.5	2.8	2.5	A2	DG		
RHS7J2D222J1 H01	UNJ (Murata)	200Vdc	2200pF±5%	4.2×3.5	2.8	5.0	K1	M2		
	UNJ (Murata)	200Vdc	3300pF±5%	4.2×3.5	2.8	2.5	A2	DG		
	UNJ (Murata)	200Vdc	3300pF±5%	4.2×3.5	2.8	5.0	K1	M2		
	UNJ (Murata)	200Vdc	4700pF±5%	4.2×3.5	2.8	2.5	A2	DG		
	UNJ (Murata)	200Vdc	4700pF±5%	4.2×3.5	2.8	5.0	K1	M2		
	UNJ (Murata)	200Vdc 200Vdc	6800pF±5%	5.5×4.0	3.3	2.5 5.0	A2	DG M2		
RHS7J2D682J2 H01 RHS7J2D103J2 H01	UNJ (Murata) UNJ (Murata)	200Vdc 200Vdc	6800pF±5% 10000pF±5%	5.5×4.0 5.5×4.0	3.3 3.3	2.5	K1 A2	M2 DG		
RHS7J2D103J2 H01	UNJ (Murata)	200Vdc 200Vdc	10000pF±5%	5.5×4.0 5.5×4.0	3.3	5.0	K1	M2		
RHS7J2H101J2 H01	UNJ (Murata)	500Vdc	100pF±5%	5.5×4.0	3.3	5.0	K1 K1	M2		
RHS7J2H151J2 H01	UNJ (Murata)	500Vdc	150pF±5%	5.5×4.0	3.3	5.0	K1 K1	M2		
RHS7J2H221J2 H01	UNJ (Murata)	500Vdc	220pF±5%	5.5×4.0	3.3	5.0	K1 K1	M2		
RHS7J2H331J2 H01	UNJ (Murata)	500Vdc	330pF±5%	5.5×4.0	3.3	5.0	K1 K1	M2		
RHS7J2H471J2 H01	UNJ (Murata)	500Vdc	470pF±5%	5.5×4.0	3.3	5.0	K1 K1	M2		
RHS7J2H681J2 H01	UNJ (Murata)	500Vdc	680pF±5%	5.5×4.0	3.3	5.0	K1 K1	M2		
RHS7J2H102J2 H01	UNJ (Murata)	500Vdc	1000pF±5%	5.5×4.0	3.3	5.0	K1 K1	M2		
RHS7J2H152J2 H01	UNJ (Murata)	500Vdc	1500pF±5%	5.5×4.0	3.3	5.0	K1 K1	M2		
RHS7J2H222J2 H01	UNJ (Murata)	500Vdc	2200pF±5%	5.5×4.0	3.3	5.0	K1 K1	M2		
RHS7J2H332J2 H01	UNJ (Murata)	500Vdc	3300pF±5%	5.5×4.0	3.3	5.0	K1	M2		
RHS7J2H472J2 H01	UNJ (Murata)	500Vdc	4700pF±5%	5.5×4.0	3.3	5.0	K1	M2		
				-	1		1	I		



High Dielectric Constant Type, X9Q Characteristics

Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RHSQ92A472K0	X9Q (Murata)	100Vdc	4700pF±10%	3.9×3.5	2.6	2.5	A2	DG
RHSQ92A472K0	X9Q (Murata)	100Vdc	4700pF±10%	3.9×3.5	2.6	5.0	K1	M2
RHSQ92A682K0 H01	X9Q (Murata)	100Vdc	6800pF±10%	3.9×3.5	2.6	2.5	A2	DG
RHSQ92A682K0 H01	X9Q (Murata)	100Vdc	6800pF±10%	3.9×3.5	2.6	5.0	K1	M2
RHSQ92A103K0 H01	X9Q (Murata)	100Vdc	10000pF±10%	3.9×3.5	2.6	2.5	A2	DG
RHSQ92A103K0 H01	X9Q (Murata)	100Vdc	10000pF±10%	3.9×3.5	2.6	5.0	K1	M2
RHSQ92A153K0 H01	X9Q (Murata)	100Vdc	15000pF±10%	3.9×3.5	2.6	2.5	A2	DG
RHSQ92A153K0 H01	X9Q (Murata)	100Vdc	15000pF±10%	3.9×3.5	2.6	5.0	K1	M2
RHSQ92A223K0	X9Q (Murata)	100Vdc	22000pF±10%	3.9×3.5	2.6	2.5	A2	DG
RHSQ92A223K0 H01	X9Q (Murata)	100Vdc	22000pF±10%	3.9×3.5	2.6	5.0	K1	M2
RHSQ92A333K1	X9Q (Murata)	100Vdc	33000pF±10%	4.2×3.5	2.8	2.5	A2	DG
RHSQ92A333K1	X9Q (Murata)	100Vdc	33000pF±10%	4.2×3.5	2.8	5.0	K1	M2
RHSQ92A473K1	X9Q (Murata)	100Vdc	47000pF±10%	4.2×3.5	2.8	2.5	A2	DG
RHSQ92A473K1 H01	X9Q (Murata)	100Vdc	47000pF±10%	4.2×3.5	2.8	5.0	K1	M2
RHSQ92A683K1	X9Q (Murata)	100Vdc	68000pF±10%	4.2×3.5	2.8	2.5	A2	DG
RHSQ92A683K1	X9Q (Murata)	100Vdc	68000pF±10%	4.2×3.5	2.8	5.0	K1	M2
RHSQ92A104K1	X9Q (Murata)	100Vdc	0.1µF±10%	4.2×3.5	2.8	2.5	A2	DG
RHSQ92A104K1	X9Q (Murata)	100Vdc	0.1µF±10%	4.2×3.5	2.8	5.0	K1	M2
RHSQ92A154K2	X9Q (Murata)	100Vdc	0.15µF±10%	5.5×4.0	3.3	2.5	A2	DG
RHSQ92A154K2	X9Q (Murata)	100Vdc	0.15µF±10%	5.5×4.0	3.3	5.0	K1	M2
RHSQ92A224K2 H01	X9Q (Murata)	100Vdc	0.22µF±10%	5.5×4.0	3.3	2.5	A2	DG
RHSQ92A224K2 H01	X9Q (Murata)	100Vdc	0.22µF±10%	5.5×4.0	3.3	5.0	K1	M2

Two blank columns are filled with the lead style code. Please refer to the 3 columns on the right for the appropriate code.

The last blank column is filled with the packaging code. (B: bulk, A: ammo pack)

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Temperature Compensating Type Specifications and Test Methods

No.	AEC-Q200	Test Item	Specifications	AEC-Q200 Test Method		
1	Pre-and Po Electrical			-		
	High	Appearance	No defects or abnormalities except color change of outer coating			
2	Temperature Exposure	Capacitance Change	Within ±3% or ±0.3pF (Whichever is larger)			
	(Storage)	Q	Q ≧ 350	Apply the 24h heat (25 to 65%) and humidity Humidity		
		I.R.	1000MΩ min.			
		Appearance	No defects or abnormalities except color change of outer coating	, 5		
3	Temperature Cycling	Capacitance Change	Within ±5% or ±0.5pF (Whichever is larger)			
		Q	Q ≧ 350			
		I.R.	1000MΩ min.	ever is larger) Sit the capacitor for 1000:12h at 200:5°C. Let sit for 24:2h at room condition*, then measure. ever is larger) Perform the 1000 cycles according to the four heat treatments listed in the following table. Let sit for 24:2h at room condition*, then measure. ever is larger) Temp. (°C) tever is larger) Temp. (°C) ever is larger) Temp. (°C) treatment shown below, 10 consecutive times. test for 24:2h at room condition*, then measure. treatment shown below, 10 consecutive times. test for 24:2h at room condition*, then measure. treatment shown below, 10 consecutive times. test for 24:2h at room condition*, then measure. treatment shown below, 10 consecutive times. test for 24:2h at room condition*, then measure. the charge/discharge current is less than 50mA. test for 24:2h at room condition*, then measure. the charge/discharge current is less than 50mA. test for 24:2h at room condition*, then measure. the charge/discharge current is less than 50mA. test if ro 24:2h at room condition*, then measure. the charge/discharge current is less than 50mA. test is for 24:2h at room condition*, then measure. The charge/discharge c		
		Appearance	No defects or abnormalities			
		Capacitance Change	Within ±5% or ±0.5pF (Whichever is larger)	Let sit for 24±2h at room condition*, then measure.		
		Q	Q ≧ 200	Humidity Humidity Humidity Humidity Humidity (°C) 90-98% 80-98% 80-98% 90-98% 90-98% 70 cm		
4	Moisture Resistance	I.R.	500MΩ min.	0		
		Appearance	No defects or abnormalities			
5	Biased	Capacitance Change	Within ±5% or ±0.5pF (Whichever is larger)	at 85±3°C and 80 to 85% humidity for 1000±12h.		
	,	Q	Q ≧ 200			
		I.R.	500MΩ min.			
		Appearance	No defects or abnormalities except color change of outer coating			
6	Operational Life	Capacitance Change	Within ±3% or ±0.3pF (Whichever is larger)	Let sit for 24±2h at room condition*, then measure		
		Q	Q ≧ 350			
		I.R.	1000MΩ min.			
7	External \	/isual	No defects or abnormalities	Visual inspection		
8	Physical D	imension	Within the specified dimensions	Using calipers and micrometers		
9	Marking		To be easily legible	Visual inspection		
		Appearance	No defects or abnormalities			
		Capacitance	Within the specified tolerance			
10	Resistance	Q	Q ≧ 1000	Solvent 2: Terpene defluxer		
	to Solvents	I.R.	10000MΩ min.	1part (by volume) of propylene glycol monomethyl ether		
		Appearance	No defects or abnormalities			
11	Mechanical	Capacitance	Within the specified tolerance			
 Resistance Biased Humidit Operational Operational Coperational Physical Physical Marking Resistand to Solven 	Shock	Q	Q ≧ 1000	duration: 0.5ms, peak value: 1500G and velocity change:		

* "room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

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Temperature Compensating Type Specifications and Test Methods

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No.	AEC-Q200	Test Item	Specifications	AEC-Q200 Test Method				
		Appearance	No defects or abnormalities	The capacitor should be subjected to a simple harmonic motion				
		Capacitance	Within the specified tolerance					
12	Vibration	Q	Q≧1000	iffed tolerance having a total amplitude of 1.5mm, the frequency being varied uniformly between the approximatel limits of 10 ad 2000Hz. The frequency range, from 10 to 2000Hz and return to 10Hz, should be applied for 12 items in each 3 mutually perpendicular directions (total of 36 times). bnormalities The lead wires should be immersed in the melted solder 1.5 to 2.0mm from the root of terminal at 260±5°C for 10±1s. Post-treatment Capacitor should be stored for 24±2h at room condition*. bnormalities First the capacitor should be stored at 120+0/-5°C for 60+0/-5 Then, the lead wires should be immersed in the melted solder 1.5 to 2.0mm from the root of terminal at 260±5°C for 7.5+0/-1s. Post-treatment Capacitor should be stored at 120+0/-5°C for 60+0/-5 Then, the lead wires should be immersed in the melted solder 1.5 to 2.0mm from the root of terminal at 260±5°C for 7.5+0/-1s. Post-treatment Capacitor should be stored for 24±2h at room condition*. bnormalities Test condition Termperature of iron-tip: 350±10°C Soldering position Straight Lead: 1.5 to 2.0mm from the root of terminal. Crimp Lead: 1.5 to 2.0mm from the end of lead bend. Post-treatment Capacitor should be stored for 24±2h at room condition*. bnormalities Perform the 300 cycles according to the two heat treatments listed in the following table (Maximum transfer time is 20s). Let sit for 24±2h at room condition*. bnormalities Perform the 300 cycles according to the two heat treatments listed in the following table (Maximum transfer time is 20s). Let sit for 24±2h at room condition*, then measure.				
		Appearance	No defects or abnormalities					
13	Resistance to	Capacitance Change	Within ±2.5% or ±0.25pF (Whichever is larger)					
1	Soldering Heat (Non-Preheat)	Dielectric Strength (Between Terminals)	No defects	Post-treatment				
		Appearance	No defects or abnormalities					
13	Resistance to	Capacitance Change	Within ±2.5% or ±0.25pF (Whichever is larger)					
2	Soldering Heat (On-Preheat)	Dielectric Strength (Between Terminals)	No defects	7.5+0/-1s. Post-treatment				
		Appearance	No defects or abnormalities					
13	Resistance to Soldering Heat	Capacitance Change	Within ±2.5% or ±0.25pF (Whichever is larger)	Soldering time: 3.5±0.5s.				
3	(soldering iron method)	Dielectric Strength (Between Terminals)	No defects	Straight Lead: 1.5 to 2.0mm from the root of terminal. Crimp Lead: 1.5 to 2.0mm from the end of lead bend. Post-treatment				
		Appearance	No defects or abnormalities					
14	Thermal	Capacitance Change	Within ±5% or ±0.5pF (Whichever is larger)	Let sit for 24±2h at room condition*, then measure.				
	Shock	Q	Q ≧ 350					
		I.R.	1000MΩ min.					
		Appearance	No defects or abnormalities					
15	ESD	Capacitance	Within the specified tolerance	- Per AEC-Q200-002				
13	230	Q	Q ≧ 1000					
		I.R.	10000MΩ min.					
16	16 Solderability		Lead wire should be soldered with uniform coating on the axial direction over 95% of the circumferential direction.	The terminal of a capacitor is dipped into a solution of ethanol (JIS-K-8101) and rosin (JIS-K-5902) (25% rosin in weight propotion) and then into molten solder (JIS-Z-3282) for 2±0.5s. In both cases the depth of dipping is up to about 1.5 to 2mm from the terminal body. Temp. of solder: 245±5°C Lead Free Solder (Sn-3.0Ag-0.5Cu)				

* "room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

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Temperature Compensating Type Specifications and Test Methods

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No.	AEC-Q200) Test Item	Specifi	cations	AEC-Q200	Test Method		
		Appearance	No defects or abnormalities		Visual inspection			
		Capacitance	Within the specified tolerance		The capacitance, Q should be n frequency and voltage shown ir			
		Q	Q ≧ 1000		Nominal Cap. Freq C ≦ 1000pF 1±0. 10µF ≧ C > 1000pF 1±0	uency Voltage 1MHz AC0.5 to 5V (r.m.s.) 1kHz AC1±0.2V (r.m.s.) ±24Hz AC0.5±0.1V (r.m.s.)		
			Room Temperature	10000MΩ min.	The insulation resistance should DC voltage not exceeding the r temperature and humidity and (Charge/Discharge current ≦ 50	within 2min of charging.		
		I.R.	High Temperature	20MΩ min.				
17	Electrical Charac- terization		Between Terminals	No defects or abnormalities	The capacitor should not be da applied between the terminatio (Charge/Discharge current ≦ 50 Rated Voltage DC100V DC200V DC500V	ons for 1 to 5s.		
		Dielectric Strength	Body Insulation	No defects or abnormalities	ects or abnormalities The capacitor is placed in a container with metal balls of 1mm diameter so that each terminal, short-circuit, is kept approximately 2mm from the balls as shown in the figure, and voltage in table is impressed for 1 to 5s between capacitor terminals and metal balls. (Charge/Discharge current ≤ 50mA.)			
					Rated VoltageTest VoltageDC100V, DC200V250% of the rated voltageDC500V150% of the rated voltage			
18	Terminal Strength	Tensile Strength	Termination not to be broken o	r loosened	As in the figure, fix the capacitor gradually to each lead in the rad until reaching 10N and then ke	dial direction of the capacitor ep the force applied for 10±1s.		
		Bending Strength						
					The capacitance change should each specified temperature ste			
	Capacitar	nce	-55 to 25°C: 0+30		Step 1 2 3 4 5	Temperature (°C) 25±2 -55±3 25±2 200±5 25±2		
19	Temperat Characte		-55 to 25°C: 0+30/-72ppm/°C 25 to 125°C: 0±30ppm/°C 125 to 200°C: 0+72/-30ppm/°C -55 to 25°C: -750+120/-347ppm/°C UNJ 25 to 125°C: -750±120ppm/°C 125 to 200°C: -750+347/-120ppm/°C		525±2The temperature coefficient is determind using the capacitance measured in step 3 as a reference. When cycling the temperature sequentially from step 1 through 5 (-55 to +200°C) the capacitance should be within the specified tolerance for the temperature coefficient.The capacitance drift is caluculated by dividing the differences betweeen the maximum and minimum measured values in the step 1, 3 and 5 by the capacitance value in step 3.			

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High Dielectric Constant Type Specifications and Test Methods

1			Specifications	AEC-Q200 Test Method
	Pre-and Pe Electrical			_
	High	Appearance	No defects or abnormalities except color change of outer coating	Sit the capacitor for 1000±12h at 200±5°C. Let sit for 24±2h
2	Temperature Exposure	Capacitance Change	Within ±12.5%	at room condition*, then measure. •Pretreatment
	(Storage)	D.F.	0.04 max.	Perform the heat treatment at 150+0/-10°C for 1h and then let sit for 24±2h at room condition*.
		I.R.	1000MΩ or 50MΩ • μ F min. (Whichever is smaller)	
		Appearance	No defects or abnormalities except color change of outer coating	Perform the 1000 cycles according to the four heat treatments listed in the following table. Let sit for 24±2h at room condition*,
	Temperature	Capacitance Change	Within ±12.5%	then measure. Step 1 2 3 4
3	3 Cycling	D.F.	0.05 max.	Temp. (°C) -55+0/-3 Room Temp. 200+5/-0 Room Temp. Time (min) 15±3 1 15±3 1
		I.R.	1000M Ω or 50M Ω • μF min. (Whichever is smaller)	•Pretreatment Perform the heat treatment at 150+0/-10°C for 1h and then let sit for 24±2h at room condition*.
		Appearance	No defects or abnormalities	Apply the 24h heat (25 to 65°C) and humidity (80 to 98%)
		Capacitance Change	Within ±12.5%	treatment shown below, 10 consecutive times. Let sit for 24±2h at room condition*, then measure.
		D.F.	0.05 max.	Humidity Humidity Humidity Humidity Humidity (°C) 90-98% 80-98% 80-98% 80-98% 80-98% 70
4	Moisture Resistance	I.R.	500MΩ or 25MΩ • μF min. (Whichever is smaller)	•Pretreatment Perform the heat treatment at 150+0/-10°C for 1h and then let sit for 24±2h at room condition*.
		Appearance	No defects or abnormalities	Apply the rated voltage and DC1.3+0.2/-0 V (add 100k Ω
5	Biased	Capacitance Change	Within ±12.5%	resistor) at 85±3°C and 80 to 85% humidity for 1000±12h. Remove and let sit for 24±2h at room condition*, then measure. The charge/discharge current is less than 50mA.
	Humidity	D.F.	0.05 max.	•Pretreatment Perform the heat treatment at 150+0/-10°C for 1h and then
		I.R.	500M Ω or 25M Ω + μF min. (Whichever is smaller)	let sit for 24±2h at room condition*.
		Appearance	No defects or abnormalities except color change of outer coating	Apply 25% of the rated voltage for 1000±12h at 200±5°C. Let sit for 24±2h at room condition*, then measure.
6	Operational Life	Capacitance Change	Within ±15%	The charge/discharge current is less than 50mA. •Pretreatment
		D.F.	0.04 max.	Apply test voltage for 60±5min at test temperature. Remove and let sit for 24±2h at room condition*.
		I.R.	100M Ω or 5M Ω • μF min. (Whichever is smaller)	
7	External \		No defects or abnormalities	Visual inspection
8	Physical D	Dimension	Within the specified dimensions	Using calipers and micrometers
9	Marking		To be easily legible	Visual inspection
		Appearance	No defects or abnormalities	Per MIL-STD-202 Method 215 Solvent 1: 1 part (by volume) of isopropyl alcohol
		Capacitance	Within the specified tolerance	3 parts (by volume) of mineral spirits
10	Resistance to Solvents	D.F. I.R.	0.025 max. 10000MΩ or 500MΩ • μF min. (Whichever is smaller)	Solvent 2: Terpene defluxer Solvent 3: 42 parts (by volume) of water 1part (by volume) of propylene glycol monomethyl ether 1 part (by volume) of monoethanolamine

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 \ast "room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

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High Dielectric Constant Type Specifications and Test Methods

Continued from the preceding page. \searrow

			ung page. a					
No.	AEC-Q200	Test Item	Specifications	AEC-Q200 Test Method				
		Appearance	No defects or abnormalities	Three shocks in each direction should be applied along 3				
11	Mechanical Shock	Capacitance	Within the specified tolerance	mutually perpendicular axes of the test specimen (18 shocks). The specified test pulse should be Half-sine and should have a				
	Shock	D.F.	0.025 max.	duration: 0.5ms, peak value: 1500G and velocity change: 4.7m/s				
		Appearance	No defects or abnormalities	The capacitor should be subjected to a simple harmonic motion				
		Capacitance	Within the specified tolerance	having a total amplitude of 1.5mm, the frequency being varied uniformly between the approximate limits of 10 and 2000Hz.				
12	Vibration	D.F.	0.025 max.	The frequency range, from 10 to 2000Hz and return to 10Hz, should be traversed in approximately 20min. This motion should be applied for 12 items in each 3 mutually perpendicular directions (total of 36 times).				
		Appearance	No defects or abnormalities	The lead wires should be immersed in the melted solder 1.5 to				
13	Resistance to	Capacitance Change	Within ±7.5%	2.0mm from the root of terminal at 260±5°C for 10±1s. •Pretreatment				
1	Soldering Heat (Non-Preheat)	Dielectric Strength (Between Terminals)	No defects	 Perform the heat treatment at 150+0/-10°C for 1h and then let sit for 24±2h at room condition*. Post-treatment Capacitor should be stored for 24±2h at room condition*. 				
		Appearance	No defects or abnormalities	First the capacitor should be stored at 120+0/-5°C for 60+0/-5s				
13	B Resistance to	Capacitance Change	Within ±7.5%	Then, the lead wires should be immersed in the melted solder 1.5 to 2.0mm from the root of terminal at 260±5°C for 7.5+0/-1s.				
2	Soldering Heat (On-Preheat)	Dielectric Strength (Between Terminals)	No defects	 Pretreatment Perform the heat treatment at 150+0/-10°C for 1h and then let sit for 24±2h at room condition*. Post-treatment Capacitor should be stored for 24±2h at room condition*. 				
		Appearance	No defects or abnormalities	Test condition				
		Capacitance Change	Within ±7.5%	Termperature of iron-tip: 350±10°C Soldering time: 3.5±0.5s Soldering position				
13 ' 3	Resistance to Soldering Heat (Soldering Iron Method)	Dielectric Strength (Between Terminals)	No defects	 Straight Lead: 1.5 to 2.0mm from the root of terminal. Crimp Lead: 1.5 to 2.0mm from the end of lead bend. Pretreatment Perform the heat treatment at 150+0/-10°C for 1h and then let sit for 24±2h at room condition*. Post-treatment Capacitor should be stored for 24±2h at room condition*. 				
		Appearance	No defects or abnormalities	Perform the 300 cycles according to the two heat treatments				
		Capacitance Change	Within ±12.5%	listed in the following table (Maximum transfer time is 20s). Let sit for 24±2h at room condition*, then measure.				
14	Thermal	D.F.	0.05 max.	Step 1 2 Temp. (°C) -55+0/-3 200+5/-0				
	Shock			Temp. (°C) -55+0/-3 200+5/-0 Time (min) 15±3 15±3				
		I.R.	1000M Ω or 50M Ω + μF min. (Whichever is smaller)	•Pretreatment Perform the heat treatment at 150+0/-10°C for 1h and then let sit for 24±2h at room condition*.				
		Appearance	No defects or abnormalities					
_	565	Capacitance	Within the specified tolerance					
.5	ESD	D.F.	0.025 max.	- Per AEC-Q200-002				
		I.R.	10000MΩ or 500MΩ • μF min. (Whichever is smaller)					
16	Solderabil	ity	Lead wire should be soldered with uniform coating on the axial direction over 95% of the circumferential direction.	The terminal of a capacitor is dipped into a solution of ethanol (JIS-K-8101) and rosin (JIS-K-5902) (25% rosin in weight propotion) and then into molten solder (JIS-Z-3282) for 2±0.5s. In both cases the depth of dipping is up to about 1.5 to 2mm from the terminal body.				
				Temp. of solder : 245±5°C Lead Free Solder (Sn-3.0Ag-0.5Cu)				

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* "room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

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High Dielectric Constant Type Specifications and Test Methods

Continued from the preceding page. \searrow

No.	AEC-Q200) Test Item		Specifications	AEC-Q200 Test Method		
		Appearance	No defects or abnorm	ormalities Visual inspection Index and to be a superior of the super			
		Capacitance	Within the specified t	olerance	The capacitance, D.F. should be measured at 25°C at the		
		D.F.	0.025 max.		$\begin{tabular}{ c c c c c c c } \hline Nominal Cap. & Frequency & Voltage \\ \hline C \leq 1000 pF & 1 \pm 0.1 MHz & AC0.5 to 5V (r.m.s.) \\ \hline 10 \mu F \geq C > 1000 pF & 1 \pm 0.1 kHz & AC1 \pm 0.2V (r.m.s.) \\ \hline \end{tabular}$		
		I.R.	Room Temperature		DC voltage not exceeding the rated voltage at normal temperature and humidity and within 2min of charging.		
17	Electrical Charac- terization	I.R.	High Temperature .		a DC voltage not exceeding 25% of the rated voltage at normal temperature and humidity and within 2min of charging.		
		Dielectric Strength	Between Terminals	No defects or abnormalities	250% of the rated voltage is applied between the terminations for 1 to 5s.		
			ength		metal balls of 1mm diameter so that each terminal, short-circuit, is kept approximately 2mm from the balls as shown in the figure, and 250% of the rated DC voltage is impressed for 1 to 5s between capacitor terminals and metal balls. (Charge/Discharge current ≦ 50mA.)		
18	Terminal Strength	Tensile Strength	n Termination not to be broken or loosened		gradually to each lead in the radial direction of the capacitor		
		Bending Strength			be bent 90° at the point of egress in one direction. Each wire is then returned to the original position and bent 90° in the		
19	Capacitance 19 Temperature Characteristics		Within the specified T -55 to 125°C: Within 125 to 200°C: Within	±15%	Step Temperature (°C) 1 25±2 2 -55±3 3 25±2 4 200±5		

* "room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

(in mm)

(in mm)

Leaded MLCC for General Purpose

RDE Series (DC25V-DC1kV)

Features

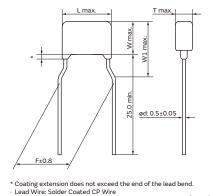
- 1. Small size and large capacitance
- 2. Low ESR characteristics for high frequency
- 3. Meet LF (Lead Free) and HF (Halogen Free)
- 4. Flow soldering is available, but re-flow soldering is not available.

Applications

General electronic equipment

(Do not use for automotive-related power train and safety equipment.)



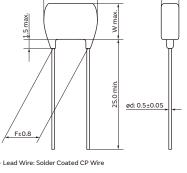


L max.

Dimensions code: 0/1 Lead style code: K1





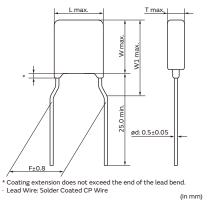


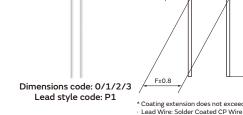
(in mm)

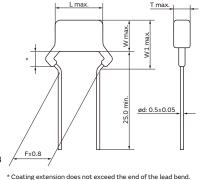
(in mm)

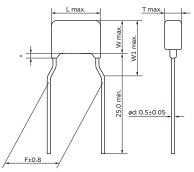
T max











Dimensions code: 2/3/4 Lead style code: K1

* Coating extension does not exceed the end of the lead bend. • Lead Wire: Solder Coated CP Wire (in mm)



Lead Wire: Solder Coated CP Wire

Dimensions

				Dimensions (mm)		
Dimensions and				Dimensions (mm)		
Lead Style Code	L	W	W1	Ť	F	d
0P1/0S1	5.0	3.5	6.0		2.5	0.5
0K1/0M1	4.0	3.5	6.0		5.0	0.5
1P1/1S1	5.0	3.5	5.0		2.5	0.5
1K1/1M1	4.5	3.5	5.0		5.0	0.5
2P1/2S1	5.5	4.0	6.0		2.5	0.5
2K1/2M1	5.5	4.0	6.0	See the individual	5.0	0.5
3P1/3S1	5.5	5.0	7.5	product specification	2.5	0.5
3K1/3M1	5.5	5.0	7.5		5.0	0.5
4K1/4M1	7.5	5.5	8.0		5.0	0.5
5B1/5E1	7.5	7.5*	-		5.0	0.5
UB1/UE1	7.7	12.5*	-		5.0	0.5
WK1/WM1	5.5	7.5	10.0		5.0	0.5

*DC630V, DC1kV: W+0.5mm

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Marking

Rated Voltage	DC2	5V	D	0C50V			DC100V		DC250V	DC500V	DC630V	DC1kV
Dimensions Temp. Code Char.	X7S	X7R	COG	X75	X7R	C0G	X7S	X7R		X7R, U	2J, COG	
0		(104K)		_			-		-		-	-
1	(224K)	_	A 102J	_	(224К)		-	(224К)	U 102J (U2J) (U2J) (102K (X7R)	(X7R)	_	-
									(H 103 J4U (U2J)		(H 472 J7U (U2J)	(U2J)
2	(CH475 K2C)	_	(C ⁵⁶³) J5A	(CH475 K5C)	(H 105 K5C)		_		(\mathbb{C}^{473}_{K4C}) (X7R) (\mathbb{C}^{153}_{J4A}) (C0G)	(CHSC) (X7R)	(\mathbb{C}^{153}_{K7C}) (X7R) (\mathbb{C}^{332}_{J7A}) (COG)	(Mac) (X7R) (X7R) (Mac) (X7R) (Mac) (X7R)
3, 4, W	(M226 K2C	_	_	(M226 K5C)	(M335 K5C)	_		_	(H473 J4U (U2J) (H224 K4C (X7R)	(H104 K9C) (X7R)	(103 J7U (U2J) (U2J) (104 K7C (X7R)	(m472 JAU (U2J) (m333 KAC (X7R)
5, U	_	_	_	_	_	_	_	_	- (<u>474</u> (X7R) (X7R)	(X7R)	(U2 J) (U2 J) (X7R)	(M 103 JAU (U2J) (U2J) (M 104 KAC (X7R)
Temperature Characteristics		vith code (omitted (P					U)					
Nominal Capacitance	Under 10	00pF: Actu	al value 1	.00pF and	over: Mark	ed with 3 f	igures					
Capacitance Tolerance		vith code omitted (P	lease refer	to the ma	rking exam	iple.)						
Rated Voltage		vith code (omitted (P					: 4, DC500	V: 9, DC63	0V: 7, DC1	lkV: A)		
Manufacturer's Identification	Marked v A part is	vith (M omitted (P	lease refer	to the ma	rking exam	iple.)						

Temperature Compensating Type, COG/U2J Characteristics

Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RDE5C1H1R0C0 H03	COG (EIA)	50Vdc	1.0pF±0.25pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H1R0C0 H03	COG (EIA)	50Vdc	1.0pF±0.25pF	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H2R0C0 H03	COG (EIA)	50Vdc	2.0pF±0.25pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H2R0C0 H03	COG (EIA)	50Vdc	2.0pF±0.25pF	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H3R0C0 H03	COG (EIA)	50Vdc	3.0pF±0.25pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H3R0C0 H03	COG (EIA)	50Vdc	3.0pF±0.25pF	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H4R0C0 H03	COG (EIA)	50Vdc	4.0pF±0.25pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H4R0C0 H03	COG (EIA)	50Vdc	4.0pF±0.25pF	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H5R0C0 H03	COG (EIA)	50Vdc	5.0pF±0.25pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H5R0C0 H03	COG (EIA)	50Vdc	5.0pF±0.25pF	5.0×3.5	2.5	2.5	P1	S1

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Continued from the preceding pa	age. 🖌							
Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RDE5C1H6R0D0 H03	COG (EIA)	50Vdc	6.0pF±0.5pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H6R0D0 H03	COG (EIA)	50Vdc	6.0pF±0.5pF	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H7R0D0 H03	COG (EIA)	50Vdc	7.0pF±0.5pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H7R0D0 H03	COG (EIA)	50Vdc	7.0pF±0.5pF	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H8R0D0 H03	COG (EIA)	50Vdc	8.0pF±0.5pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H8R0D0 H03	COG (EIA)	50Vdc	8.0pF±0.5pF	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H9R0D0 H03	COG (EIA)	50Vdc	9.0pF±0.5pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H9R0D0 H03	COG (EIA)	50Vdc	9.0pF±0.5pF	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H100J0 H03	COG (EIA)	50Vdc	10pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H100J0	COG (EIA)	50Vdc	10pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H120J0 H03	COG (EIA)	50Vdc	12pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H120J0 H03	COG (EIA)	50Vdc	12pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H150J0 H03	COG (EIA)	50Vdc	15pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H150J0 H03	COG (EIA)	50Vdc	15pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H180J0 H03	COG (EIA)	50Vdc	18pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H180J0 H03	COG (EIA)	50Vdc	18pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H220J0 H03	COG (EIA)	50Vdc	22pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H220J0	COG (EIA)	50Vdc	22pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H270J0 H03	COG (EIA)	50Vdc	27pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H270J0 H03	COG (EIA)	50Vdc	27pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H330J0 H03	COG (EIA)	50Vdc	33pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H330J0 H03	COG (EIA)	50Vdc	33pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H390J0	COG (EIA)	50Vdc	39pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H390J0 H03	COG (EIA)	50Vdc	39pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H470J0 H03	COG (EIA)	50Vdc	47pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H470J0 H03	COG (EIA)	50Vdc	47pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H560J0 H03	COG (EIA)	50Vdc	56pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H560J0 H03	COG (EIA)	50Vdc	56pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H680J0 H03	COG (EIA)	50Vdc	68pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H680J0 H03	COG (EIA)	50Vdc	68pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H820J0	COG (EIA)	50Vdc	82pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H820J0 H03	COG (EIA)	50Vdc	82pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H101J0 H03	COG (EIA)	50Vdc	100pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H101J0 H03	COG (EIA)	50Vdc	100pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H121J0 H03	COG (EIA)	50Vdc	120pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H121J0 H03	COG (EIA)	50Vdc	120pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H151J0	COG (EIA)	50Vdc	150pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H151J0	COG (EIA)	50Vdc	150pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H181J0	COG (EIA)	50Vdc	180pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H181J0	COG (EIA)	50Vdc	180pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H221J0 H03	COG (EIA)	50Vdc	220pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H221J0 H03	COG (EIA)	50Vdc	220pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H271J0 H03	COG (EIA)	50Vdc	270pF±5%	4.0×3.5	2.5	5.0	K1	M1
	COG (EIA)	50Vdc	270pF±5%	5.0×3.5	2.5	2.5	P1	S1
	COG (EIA)	50Vdc	330pF±5%	4.0×3.5	2.5	5.0	K1 P1	M1
	COG (EIA)	50Vdc 50Vdc	330pF±5%	5.0×3.5 4.0×3.5	2.5 2.5	2.5 5.0		S1 M1
RDE5C1H391J0 H03 RDE5C1H391J0 H03	COG (EIA) COG (EIA)	50Vdc 50Vdc	390pF±5% 390pF±5%	4.0×3.5 5.0×3.5	2.5	2.5	K1 P1	M1 51
RDE5C1H471J0_H03	COG (EIA)	50Vdc 50Vdc	470pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H471J0H03_	COG (EIA)	50Vdc	470pF±5%	4.0×3.5	2.5	2.5	P1	S1
RDE5C1H561J0 H03	COG (EIA)	50Vdc	560pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H561J0 H03	COG (EIA)	50Vdc	560pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H681J0 H03	COG (EIA)	50Vdc	680pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H681J0 H03	COG (EIA)	50Vdc	680pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H821J0 H03	COG (EIA)	50Vdc	820pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H821J0 H03	COG (EIA)	50Vdc	820pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H102J0	COG (EIA)	50Vdc	1000pF±5%	4.0×3.5	2.5	5.0	K1	M1
		1		-	1			<u> </u>



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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RDE5C1H102J0 H03	COG (EIA)	50Vdc	1000pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H122J0 H03	COG (EIA)	50Vdc	1200pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H122J0 H03	COG (EIA)	50Vdc	1200pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H152J0 H03	COG (EIA)	50Vdc	1500pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H152J0	COG (EIA)	50Vdc	1500pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H182J0 H03	COG (EIA)	50Vdc	1800pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H182J0 H03	COG (EIA)	50Vdc	1800pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H222J0 H03	COG (EIA)	50Vdc	2200pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H222J0 H03	COG (EIA)	50Vdc	2200pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H272J0 H03	COG (EIA)	50Vdc	2700pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H272J0 H03	COG (EIA)	50Vdc	2700pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H332J0 H03	COG (EIA)	50Vdc	3300pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H332J0 H03	COG (EIA)	50Vdc	3300pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H392J0 H03	COG (EIA)	50Vdc	3900pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C1H392J0 H03	COG (EIA)	50Vdc	3900pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C1H472J1 H03	COG (EIA)	50Vdc	4700pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE5C1H472J1	COG (EIA)	50Vdc	4700pF±5%	5.0×3.5	3.15	2.5	P1	S1
RDE5C1H562J1 H03	COG (EIA)	50Vdc	5600pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE5C1H562J1 H03	COG (EIA)	50Vdc	5600pF±5%	5.0×3.5	3.15	2.5	P1	S1
RDE5C1H682J1 H03	COG (EIA)	50Vdc	6800pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE5C1H682J1 H03	COG (EIA)	50Vdc	6800pF±5%	5.0×3.5	3.15	2.5	P1	S1
RDE5C1H822J1 H03	COG (EIA)	50Vdc	8200pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE5C1H822J1 H03	COG (EIA)	50Vdc	8200pF±5%	5.0×3.5	3.15	2.5	P1	S1
RDE5C1H103J1	COG (EIA)	50Vdc	10000pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE5C1H103J1	COG (EIA)	50Vdc	10000pF±5%	5.0×3.5	3.15	2.5	P1	S1
RDE5C1H123J1	COG (EIA)	50Vdc	12000pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE5C1H123J1	COG (EIA)	50Vdc	12000pF±5%	5.0×3.5	3.15	2.5	P1	S1
RDE5C1H153J1	COG (EIA)	50Vdc	15000pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE5C1H153J1	COG (EIA)	50Vdc	15000pF±5%	5.0×3.5	3.15	2.5	P1	S1
RDE5C1H183J1	COG (EIA)	50Vdc	18000pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE5C1H183J1	COG (EIA)	50Vdc	18000pF±5%	5.0×3.5	3.15	2.5	P1	S1
RDE5C1H223J1 H03	COG (EIA)	50Vdc	22000pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE5C1H223J1	COG (EIA)	50Vdc	22000pF±5%	5.0×3.5	3.15	2.5	P1	S1
RDE5C1H273J2	COG (EIA)	50Vdc	27000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C1H273J2	COG (EIA)	50Vdc	27000pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C1H333J2	COG (EIA)	50Vdc	33000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C1H333J2	COG (EIA)	50Vdc	33000pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C1H393J2	COG (EIA)	50Vdc	39000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C1H393J2	COG (EIA)	50Vdc	39000pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C1H473J2	COG (EIA)	50Vdc	47000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C1H473J2	COG (EIA)	50Vdc	47000pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C1H563J2	COG (EIA)	50Vdc	56000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C1H563J2	COG (EIA)	50Vdc	56000pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C1H683J2	COG (EIA)	50Vdc	68000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C1H683J2	COG (EIA)	50Vdc	68000pF±5%	5.5×4.0	3.15	2.5	P1	\$1
RDE5C1H823J2	COG (EIA)	50Vdc	82000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C1H823J2	COG (EIA)	50Vdc	82000pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C1H104J2	COG (EIA)	50Vdc	0.1µF±5%	5.5×4.0	3.15	5.0	K1	M1
	COG (EIA)	50Vdc	0.1µF±5%	5.5×4.0	3.15	2.5	P1	S1
	COG (EIA)	100Vdc	1.0pF±0.25pF	4.0×3.5	2.5	5.0	K1	M1
	COG (EIA)	100Vdc	1.0pF±0.25pF	5.0×3.5	2.5	2.5	P1	S1
	COG (EIA)	100Vdc	2.0pF±0.25pF	4.0×3.5	2.5	5.0	K1	M1
	COG (EIA)	100Vdc	2.0pF±0.25pF	5.0×3.5	2.5	2.5	P1	S1 M1
	COG (EIA)	100Vdc	3.0pF±0.25pF	4.0×3.5	2.5	5.0	K1	M1
	COG (EIA)	100Vdc 100Vdc	3.0pF±0.25pF 4.0pF±0.25pF	5.0×3.5 4.0×3.5	2.5 2.5	2.5 5.0	P1 K1	S1 M1
RDE5C2A4R0C0 H03 RDE5C2A4R0C0 H03	COG (EIA) COG (EIA)	100Vdc 100Vdc	4.0pF±0.25pF 4.0pF±0.25pF	4.0×3.5 5.0×3.5	2.5	2.5	K1 P1	M1 51
		TOOACC	ч.орг±0.25рг	5.0×3.5	2.5	2.5		

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RDE5C2A5R0C0 H03	COG (EIA)	100Vdc	5.0pF±0.25pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A5R0C0	COG (EIA)	100Vdc	5.0pF±0.25pF	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A6R0D0	COG (EIA)	100Vdc	6.0pF±0.5pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A6R0D0	COG (EIA)	100Vdc	6.0pF±0.5pF	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A7R0D0 H03	COG (EIA)	100Vdc	7.0pF±0.5pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A7R0D0	COG (EIA)	100Vdc	7.0pF±0.5pF	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A8R0D0	COG (EIA)	100Vdc	8.0pF±0.5pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A8R0D0	COG (EIA)	100Vdc	8.0pF±0.5pF	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A9R0D0	COG (EIA)	100Vdc	9.0pF±0.5pF	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A9R0D0	COG (EIA)	100Vdc	9.0pF±0.5pF	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A100J0	COG (EIA)	100Vdc	10pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A100J0	COG (EIA)	100Vdc	10pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A120J0 H03	COG (EIA)	100Vdc	12pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A120J0	COG (EIA)	100Vdc	12pF±5%	5.0×3.5	2.5	2.5	P1	
RDE5C2A150J0 H03	COG (EIA)	100Vdc	15pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A150J0 H03	COG (EIA)	100Vdc	15pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A180J0 H03	COG (EIA)	100Vdc	18pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A180J0	COG (EIA)	100Vdc	18pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A220J0 H03	COG (EIA)	100Vdc	22pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A220J0 H03	COG (EIA)	100Vdc	22pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A270J0 H03	COG (EIA)	100Vdc	27pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A270J0	COG (EIA)	100Vdc	27pF±5%	5.0×3.5	2.5	2.5	P1	
RDE5C2A330J0 H03	COG (EIA)	100Vdc	33pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A330J0 H03	COG (EIA)	100Vdc	33pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A390J0	COG (EIA)	100Vdc	39pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A390J0	COG (EIA)	100Vdc	39pF±5%	5.0×3.5	2.5	2.5	P1	
RDE5C2A470J0	COG (EIA)	100Vdc	47pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A470J0	COG (EIA)	100Vdc	47pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A560J0	COG (EIA)	100Vdc	56pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A560J0 H03	COG (EIA)	100Vdc	56pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A680J0 H03	COG (EIA)	100Vdc	68pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A680J0 H03	COG (EIA)	100Vdc	68pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A820J0 H03	COG (EIA)	100Vdc	82pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A820J0 H03	COG (EIA)	100Vdc	82pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A101J0 H03	COG (EIA)	100Vdc	100pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A101J0 H03	COG (EIA)	100Vdc	100pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A121J0 H03	COG (EIA)	100Vdc	120pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A121J0 H03	COG (EIA)	100Vdc	120pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A151J0 H03	COG (EIA)	100Vdc	150pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A151J0	COG (EIA)	100Vdc	150pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A181J0	COG (EIA)	100Vdc	180pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A181J0	COG (EIA)	100Vdc	180pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A221J0 H03	COG (EIA)	100Vdc	220pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A221J0 H03	COG (EIA)	100Vdc	220pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A271J0	COG (EIA)	100Vdc	270pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A271J0 H03	COG (EIA)	100Vdc	270pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A331J0 H03	COG (EIA)	100Vdc	330pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A331J0	COG (EIA)	100Vdc	330pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A391J0	COG (EIA)	100Vdc	390pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A391J0	COG (EIA)	100Vdc	390pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A471J0	COG (EIA)	100Vdc	470pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A471J0	COG (EIA)	100Vdc	470pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A561J0	COG (EIA)	100Vdc	560pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A561J0	COG (EIA)	100Vdc	560pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A681J0	COG (EIA)	100Vdc	680pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A681J0	COG (EIA)	100Vdc	680pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A821J0	COG (EIA)	100Vdc	820pF±5%	4.0×3.5	2.5	5.0	K1	M1



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Part Number	Temp.	Rated	Capacitance	Dimensions LxW	Dimension T	Lead Space F	Lead Style Code	Lead Style Code
	Char.	Voltage		(mm)	(mm)	(mm)	Bulk	Taping
RDE5C2A821J0	COG (EIA)	100Vdc	820pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A102J0	COG (EIA)	100Vdc	1000pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A102J0	COG (EIA)	100Vdc	1000pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A122J0	COG (EIA)	100Vdc	1200pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A122J0	COG (EIA)	100Vdc	1200pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A152J0	COG (EIA)	100Vdc	1500pF±5%	4.0×3.5	2.5	5.0	K1	M1
RDE5C2A152J0	COG (EIA)	100Vdc	1500pF±5%	5.0×3.5	2.5	2.5	P1	S1
RDE5C2A182J1	COG (EIA)	100Vdc	1800pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE5C2A182J1	COG (EIA)	100Vdc	1800pF±5%	5.0×3.5	3.15	2.5	P1	S1
RDE5C2A222J1	COG (EIA)	100Vdc	2200pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE5C2A222J1	COG (EIA)	100Vdc	2200pF±5%	5.0×3.5	3.15	2.5	P1	S1
RDE5C2A272J1	COG (EIA)	100Vdc	2700pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE5C2A272J1	COG (EIA)	100Vdc	2700pF±5%	5.0×3.5	3.15	2.5	P1	S1
RDE5C2A332J1	COG (EIA)	100Vdc	3300pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE5C2A332J1	COG (EIA)	100Vdc	3300pF±5%	5.0×3.5	3.15	2.5	P1	S1
RDE5C2A392J2 H03	COG (EIA)	100Vdc	3900pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2A392J2 H03	COG (EIA)	100Vdc	3900pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C2A472J2 H03	COG (EIA)	100Vdc	4700pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2A472J2 H03	COG (EIA)	100Vdc	4700pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C2A562J2	COG (EIA)	100Vdc	5600pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2A562J2 H03	COG (EIA)	100Vdc	5600pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C2A682J2	COG (EIA)	100Vdc	6800pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2A682J2	COG (EIA)	100Vdc	6800pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C2A822J2 H03	COG (EIA)	100Vdc	8200pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2A822J2 H03	COG (EIA)	100Vdc	8200pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C2A103J2	COG (EIA)	100Vdc	10000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2A103J2	COG (EIA)	100Vdc	10000pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C2A123J2	COG (EIA)	100Vdc	12000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2A123J2	COG (EIA)	100Vdc	12000pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C2A153J2	COG (EIA)	100Vdc	15000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2A153J2	COG (EIA)	100Vdc	15000pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C2A183J2	COG (EIA)	100Vdc	18000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2A183J2 H03	COG (EIA)	100Vdc	18000pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C2A223J2	COG (EIA)	100Vdc	22000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2A223J2	COG (EIA)	100Vdc	22000pF±5%	5.5×4.0	3.15	2.5	P1	S1
RDE5C2E100J2	COG (EIA)	250Vdc	10pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E120J2	COG (EIA)	250Vdc	12pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E150J2	COG (EIA)	250Vdc	15pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E180J2	COG (EIA)	250Vdc	18pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E220J2 H03	COG (EIA)	250Vdc	22pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E270J2 H03	COG (EIA)	250Vdc	27pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E330J2	COG (EIA)	250Vdc	33pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E390J2	COG (EIA)	250Vdc	39pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E470J2	COG (EIA)	250Vdc	47pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E560J2	COG (EIA)	250Vdc	56pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E680J2	COG (EIA)	250Vdc	68pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E820J2	COG (EIA)	250Vdc	82pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E101J2	COG (EIA)	250Vdc	100pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E121J2	COG (EIA)	250Vdc	120pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E151J2	COG (EIA)	250Vdc	150pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E181J2	COG (EIA)	250Vdc	180pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E221J2 HO3	COG (EIA)	250Vdc	220pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E271J2 HO3	COG (EIA)	250Vdc	270pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E331J2 H03	COG (EIA)	250Vdc	330pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E391J2 H03	COG (EIA)	250Vdc	390pF±5%	5.5×4.0	3.15	5.0	K1 K1	M1
RDE5C2E471J2 H03	COG (EIA)	250Vdc	470pF±5%	5.5×4.0	3.15	5.0	K1 K1	M1
RDE5C2E561J2 H03	COG (EIA)	250Vdc	560pF±5%	5.5×4.0	3.15	5.0	K1 K1	M1
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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RDE5C2E681J2	COG (EIA)	250Vdc	680pF±5%	5.5×4.0	3.15	5.0	К1	M1
RDE5C2E821J2 H03	COG (EIA)	250Vdc	820pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E102J2 H03	COG (EIA)	250Vdc	1000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E122J2 H03	COG (EIA)	250Vdc	1200pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E152J2 H03	COG (EIA)	250Vdc	1500pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E182J2	COG (EIA)	250Vdc	1800pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E222J2	COG (EIA)	250Vdc	2200pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E272J2	COG (EIA)	250Vdc	2700pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E332J2	COG (EIA)	250Vdc	, 3300pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E392J2	COG (EIA)	250Vdc	3900pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E472J2	COG (EIA)	250Vdc	4700pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E562J2 H03	COG (EIA)	250Vdc	5600pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E682J2	COG (EIA)	250Vdc	6800pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E822J2 H03	COG (EIA)	250Vdc	8200pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E103J2	COG (EIA)	250Vdc	10000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E123J2 HO3	COG (EIA)	250Vdc	12000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2E153J2 HO3	COG (EIA)	250Vdc	15000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J100J2 H03	COG (EIA)	630Vdc	10pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J120J2 H03	COG (EIA)	630Vdc	12pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J150J2 H03	COG (EIA)	630Vdc	15pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J180J2 H03	COG (EIA)	630Vdc	18pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J220J2 H03	COG (EIA)	630Vdc	22pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J270J2 H03	COG (EIA)	630Vdc	27pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J330J2 H03	COG (EIA)	630Vdc	33pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J390J2 H03	COG (EIA)	630Vdc	39pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J470J2 H03	COG (EIA)	630Vdc	47pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J560J2 H03	COG (EIA)	630Vdc	56pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J680J2 H03	COG (EIA)	630Vdc	68pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J820J2 H03	COG (EIA)	630Vdc	82pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J101J2 H03	COG (EIA)	630Vdc	100pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J121J2 H03	COG (EIA)	630Vdc	120pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J151J2 H03	COG (EIA)	630Vdc	150pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J181J2 H03	COG (EIA)	630Vdc	180pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J221J2 H03	COG (EIA)	630Vdc	220pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J271J2 H03	COG (EIA)	630Vdc	270pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J331J2 H03	COG (EIA)	630Vdc	330pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J391J2 H03	COG (EIA)	630Vdc	390pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J471J2 H03	COG (EIA)	630Vdc	470pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J561J2 H03	COG (EIA)	630Vdc	560pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J681J2 H03	COG (EIA)	630Vdc	680pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J821J2 H03	COG (EIA)	630Vdc	820pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J102J2 H03	COG (EIA)	630Vdc	1000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J122J2 H03	COG (EIA)	630Vdc	1200pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J152J2 H03	COG (EIA)	630Vdc	1500pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J182J2 H03	COG (EIA)	630Vdc	1800pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J222J2 H03	COG (EIA)	630Vdc	2200pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J272J2 H03	COG (EIA)	630Vdc	2700pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C2J332J2 H03	COG (EIA)	630Vdc	3300pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A100J2	COG (EIA)	1000Vdc	10pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A120J2	COG (EIA)	1000Vdc	12pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A150J2	COG (EIA)	1000Vdc	15pF±5%	5.5×4.0	3.15	5.0	K1	M1
	COG (EIA)	1000Vdc	18pF±5%	5.5×4.0	3.15	5.0	K1	M1
	COG (EIA)	1000Vdc	22pF±5%	5.5×4.0	3.15	5.0	K1	M1
	COG (EIA)	1000Vdc	27pF±5%	5.5×4.0	3.15	5.0 E.O	K1	M1
	COG (EIA)	1000Vdc	33pF±5%	5.5×4.0	3.15	5.0 E.O	K1	M1
	COG (EIA)	1000Vdc	39pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A470J2	COG (EIA)	1000Vdc	47pF±5%	5.5×4.0	3.15	5.0	K1	M1

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RDE5C3A560J2	COG (EIA)	1000Vdc	56pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A680J2	COG (EIA)	1000Vdc	68pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A820J2	COG (EIA)	1000Vdc	82pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A101J2	COG (EIA)	1000Vdc	100pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A121J2	COG (EIA)	1000Vdc	120pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A151J2	COG (EIA)	1000Vdc	150pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A181J2	COG (EIA)	1000Vdc	180pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A221J2	COG (EIA)	1000Vdc	220pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A271J2	COG (EIA)	1000Vdc	270pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A331J2	COG (EIA)	1000Vdc	330pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A391J2	COG (EIA)	1000Vdc	390pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A471J2	COG (EIA)	1000Vdc	470pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A561J2	COG (EIA)	1000Vdc	560pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A681J2	COG (EIA)	1000Vdc	680pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A821J2	COG (EIA)	1000Vdc	820pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE5C3A102J2 H03	COG (EIA)	1000Vdc	1000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U2E101J1	U2J (EIA)	250Vdc	100pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE7U2E151J1 H03	U2J (EIA)	250Vdc	150pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE7U2E221J1 H03	U2J (EIA)	250Vdc	220pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE7U2E331J1	U2J (EIA)	250Vdc	330pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE7U2E471J1 H03	U2J (EIA)	250Vdc	470pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE7U2E681J1 H03	U2J (EIA)	250Vdc	680pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE7U2E102J1	U2J (EIA)	250Vdc	1000pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE7U2E152J1 H03	U2J (EIA)	250Vdc	1500pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE7U2E222J1 H03	U2J (EIA)	250Vdc	2200pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE7U2E332J1 HO3	U2J (EIA)	250Vdc	3300pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE7U2E472J1	U2J (EIA)	250Vdc	4700pF±5%	4.5×3.5	3.15	5.0	K1	M1
RDE7U2E682J2	U2J (EIA)	250Vdc	6800pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U2E103J2	U2J (EIA)	250Vdc	10000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U2E153J2	U2J (EIA)	250Vdc	15000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U2E223J2	U2J (EIA)	250Vdc	22000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U2E333J3 HO3	U2J (EIA)	250Vdc	33000pF±5%	5.5×5.0	4.0	5.0	K1	M1
RDE7U2E473J3 H03	U2J (EIA)	250Vdc	47000pF±5%	5.5×5.0	4.0	5.0	K1	M1
RDE7U2J100J2 H03	U2J (EIA)	630Vdc	10pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U2J150J2 H03	U2J (EIA)	630Vdc	15pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U2J220J2 H03	U2J (EIA)	630Vdc	22pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U2J330J2 H03	U2J (EIA)	630Vdc	33pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U2J470J2 H03	U2J (EIA)	630Vdc	47pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U2J680J2 H03	U2J (EIA)	630Vdc	68pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U2J101J2	U2J (EIA)	630Vdc	100pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U2J151J2	U2J (EIA)	630Vdc	150pF±5%	5.5×4.0	3.15	5.0	K1	M1
	U2J (EIA)	630Vdc	220pF±5%	5.5×4.0	3.15	5.0	K1	M1
	U2J (EIA)	630Vdc	330pF±5%	5.5×4.0	3.15	5.0	K1	M1
	U2J (EIA)	630Vdc	470pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U2J681J2 H03	U2J (EIA)	630Vdc 630Vdc	680pF±5%	5.5×4.0 5.5×4.0	3.15	5.0 E.O	K1 K1	M1
RDE7U2J102J2 H03 RDE7U2J152J2 H03	U2J (EIA) U2J (EIA)	630Vdc	1000pF±5% 1500pF±5%	5.5×4.0	3.15 3.15	5.0	K1 K1	M1 M1
RDE7U2J222J2 H03	U2J (EIA)	630Vdc	2200pF±5%	5.5×4.0	3.15	5.0	K1 K1	 M1
RDE7U2J332J2 H03	U2J (EIA)	630Vdc	3300pF±5%	5.5×4.0	3.15	5.0	K1 K1	M1
RDE7U2J472J2 H03	U2J (EIA)	630Vdc	4700pF±5%	5.5×4.0	3.15	5.0	K1 K1	M1
RDE702J472J2H03	U2J (EIA)	630Vdc	6800pF±5%	5.5×5.0	4.0	5.0	K1 K1	M1
RDE7U2J103J3 H03	U2J (EIA)	630Vdc	10000pF±5%	5.5×5.0	4.0	5.0	K1 K1	M1
RDE7U2J153J4 H03	U2J (EIA)	630Vdc	15000pF±5%	7.5×5.5	4.0	5.0	K1 K1	M1
RDE7U2J223J4H03_	U2J (EIA)	630Vdc	22000pF±5%	7.5×5.5	4.0	5.0	K1 K1	M1
RDE702J223J4H03_	U2J (EIA)	630Vdc	33000pF±5%	7.5×8.0	4.0	5.0	B1	E1
RDE7U2J473J5	U2J (EIA)	630Vdc	47000pF±5%	7.5×8.0	4.0	5.0	B1 B1	E1
RDE7U2J943JU	U2J (EIA)	630Vdc	94000pF±5%	7.7×13.0	4.0	5.0	B1	E1
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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RDE7U3A100J2	U2J (EIA)	1000Vdc	10pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U3A150J2	U2J (EIA)	1000Vdc	15pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U3A220J2 H03	U2J (EIA)	1000Vdc	22pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U3A330J2 H03	U2J (EIA)	1000Vdc	33pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U3A470J2	U2J (EIA)	1000Vdc	47pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U3A680J2	U2J (EIA)	1000Vdc	68pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U3A101J2	U2J (EIA)	1000Vdc	100pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U3A151J2	U2J (EIA)	1000Vdc	150pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U3A221J2	U2J (EIA)	1000Vdc	220pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U3A331J2	U2J (EIA)	1000Vdc	330pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U3A471J2	U2J (EIA)	1000Vdc	470pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U3A681J2	U2J (EIA)	1000Vdc	680pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U3A102J2	U2J (EIA)	1000Vdc	1000pF±5%	5.5×4.0	3.15	5.0	K1	M1
RDE7U3A152J3 H03	U2J (EIA)	1000Vdc	1500pF±5%	5.5×5.0	4.0	5.0	K1	M1
RDE7U3A222J3 H03	U2J (EIA)	1000Vdc	2200pF±5%	5.5×5.0	4.0	5.0	K1	M1
RDE7U3A332J4 H03	U2J (EIA)	1000Vdc	3300pF±5%	7.5×5.5	4.0	5.0	K1	M1
RDE7U3A472J4 H03	U2J (EIA)	1000Vdc	4700pF±5%	7.5×5.5	4.0	5.0	K1	M1
RDE7U3A682J5	U2J (EIA)	1000Vdc	6800pF±5%	7.5×8.0	4.0	5.0	B1	E1
RDE7U3A103J5	U2J (EIA)	1000Vdc	10000pF±5%	7.5×8.0	4.0	5.0	B1	E1
RDE7U3A203JU	U2J (EIA)	1000Vdc	20000pF±5%	7.7×13.0	4.0	5.0	B1	E1

Two blank columns are filled with the lead style code. Please refer to the 3 columns on the right for the appropriate code.

The last blank column is filled with the packaging code. (B: bulk, A: ammo pack)

High Dielectric Constant Type, X7R/X7S Characteristics

Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RDER71E104K0 H03	X7R (EIA)	25Vdc	0.1µF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71E104K0	X7R (EIA)	25Vdc	0.1µF±10%	5.0×3.5	2.5	2.5	P1	S1
RDEC71E224K0 H03	X7S (EIA)	25Vdc	0.22µF±10%	4.0×3.5	2.5	5.0	K1	M1
RDEC71E224K0 H03	X7S (EIA)	25Vdc	0.22µF±10%	5.0×3.5	2.5	2.5	P1	S1
RDEC71E474K0 H03	X7S (EIA)	25Vdc	0.47µF±10%	4.0×3.5	2.5	5.0	K1	M1
RDEC71E474K0 H03	X7S (EIA)	25Vdc	0.47µF±10%	5.0×3.5	2.5	2.5	P1	S1
RDEC71E105K0 H03	X7S (EIA)	25Vdc	1.0µF±10%	4.0×3.5	2.5	5.0	K1	M1
RDEC71E105K0 H03	X7S (EIA)	25Vdc	1.0µF±10%	5.0×3.5	2.5	2.5	P1	S1
RDEC71E225K1 H03	X7S (EIA)	25Vdc	2.2µF±10%	4.5×3.5	3.15	5.0	K1	M1
RDEC71E225K1 H03	X7S (EIA)	25Vdc	2.2µF±10%	5.0×3.5	3.15	2.5	P1	S1
RDEC71E475K2 H03	X7S (EIA)	25Vdc	4.7µF±10%	5.5×4.0	3.15	2.5	P1	S1
RDEC71E475K2 H03	X7S (EIA)	25Vdc	4.7µF±10%	5.5×4.0	3.15	5.0	K1	M1
RDEC71E106K2 H03	X7S (EIA)	25Vdc	10µF±10%	5.5×4.0	3.15	2.5	P1	S1
RDEC71E106K2 H03	X7S (EIA)	25Vdc	10µF±10%	5.5×4.0	3.15	5.0	K1	M1
RDEC71E226K3 H03	X7S (EIA)	25Vdc	22µF±10%	5.5×5.0	4.0	2.5	P1	S1
RDEC71E226K3 H03	X7S (EIA)	25Vdc	22µF±10%	5.5×5.0	4.0	5.0	K1	M1
RDEC71E476MW H03	X7S (EIA)	25Vdc	47µF±20%	5.5×7.5	4.0	5.0	K1	M1
RDER71H221K0 H03	X7R (EIA)	50Vdc	220pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H221K0 H03	X7R (EIA)	50Vdc	220pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H331K0 H03	X7R (EIA)	50Vdc	330pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H331K0 H03	X7R (EIA)	50Vdc	330pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H471K0 H03	X7R (EIA)	50Vdc	470pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H471K0 H03	X7R (EIA)	50Vdc	470pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H681K0 H03	X7R (EIA)	50Vdc	680pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H681K0 H03	X7R (EIA)	50Vdc	680pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H102K0 H03	X7R (EIA)	50Vdc	1000pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H102K0 H03	X7R (EIA)	50Vdc	1000pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H152K0 H03	X7R (EIA)	50Vdc	1500pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H152K0 H03	X7R (EIA)	50Vdc	1500pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H222K0 H03	X7R (EIA)	50Vdc	2200pF±10%	4.0×3.5	2.5	5.0	K1	M1

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RDER71H222K0 H03	X7R (EIA)	50Vdc	2200pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H332K0 H03	X7R (EIA)	50Vdc	3300pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H332K0 H03	X7R (EIA)	50Vdc	3300pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H472K0 H03	X7R (EIA)	50Vdc	4700pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H472K0 H03	X7R (EIA)	50Vdc	4700pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H682K0 H03	X7R (EIA)	50Vdc	6800pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H682K0 H03	X7R (EIA)	50Vdc	6800pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H103K0 H03	X7R (EIA)	50Vdc	10000pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H103K0 H03	X7R (EIA)	50Vdc	10000pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H153K0 H03	X7R (EIA)	50Vdc	15000pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H153K0 H03	X7R (EIA)	50Vdc	15000pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H223K0 H03	X7R (EIA)	50Vdc	22000pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H223K0 H03	X7R (EIA)	50Vdc	22000pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H333K0 H03	X7R (EIA)	50Vdc	33000pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H333K0 H03	X7R (EIA)	50Vdc	33000pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H473K0 H03	X7R (EIA)	50Vdc	47000pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H473K0 H03	X7R (EIA)	50Vdc	47000pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H683K0 H03	X7R (EIA)	50Vdc	68000pF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H683K0 H03	X7R (EIA)	50Vdc	68000pF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H104K0 H03	X7R (EIA)	50Vdc	0.1µF±10%	4.0×3.5	2.5	5.0	K1	M1
RDER71H104K0 H03	X7R (EIA)	50Vdc	0.1µF±10%	5.0×3.5	2.5	2.5	P1	S1
RDER71H154K1 H03	X7R (EIA)	50Vdc	0.15µF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER71H154K1 H03	X7R (EIA)	50Vdc	0.15µF±10%	5.0×3.5	3.15	2.5	P1	S1
RDER71H224K1 H03	X7R (EIA)	50Vdc	0.22µF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER71H224K1 H03	X7R (EIA)	50Vdc	0.22µF±10%	5.0×3.5	3.15	2.5	P1	S1
RDER71H334K1 H03	X7R (EIA)	50Vdc	0.33µF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER71H334K1 H03	X7R (EIA)	50Vdc	0.33µF±10%	5.0×3.5	3.15	2.5	P1	S1
RDER71H474K1 H03	X7R (EIA)	50Vdc	0.47µF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER71H474K1 H03	X7R (EIA)	50Vdc	0.47µF±10%	5.0×3.5	3.15	2.5	P1	S1
RDER71H684K2 H03	X7R (EIA)	50Vdc	0.68µF±10%	5.5×4.0	3.15	2.5	P1	S1
RDER71H684K2 H03	X7R (EIA)	50Vdc	0.68µF±10%	5.5×4.0	3.15	5.0	K1	M1
RDEC71H105K1 H03	X7S (EIA)	50Vdc	1.0µF±10%	4.5×3.5	3.15	5.0	K1	M1
RDEC71H105K1 H03	X7S (EIA)	50Vdc	1.0µF±10%	5.0×3.5	3.15	2.5	P1	S1
RDER71H105K2 H03	X7R (EIA)	50Vdc	1.0µF±10%	5.5×4.0	3.15	2.5	P1	S1
RDER71H105K2	X7R (EIA)	50Vdc	1.0µF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER71H155K2	X7R (EIA)	50Vdc	1.5µF±10%	5.5×4.0	3.15	2.5	P1	S1
RDER71H155K2	X7R (EIA)	50Vdc	1.5µF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER71H225K2 H03	X7R (EIA)	50Vdc	2.2µF±10%	5.5×4.0	3.15	2.5	P1	S1
RDER71H225K2 H03	X7R (EIA)	50Vdc	2.2µF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER71H335K3 H03	X7R (EIA)	50Vdc	3.3µF±10%	5.5×5.0	4.0	2.5	P1	S1
RDER71H335K3	X7R (EIA)	50Vdc	3.3µF±10%	5.5×5.0	4.0	5.0	K1	M1
RDEC71H475K2	X7S (EIA)	50Vdc	4.7µF±10%	5.5×4.0	3.15	2.5	P1	\$1
RDEC71H475K2 H03	X7S (EIA)	50Vdc	4.7µF±10%	5.5×4.0	3.15	5.0	K1	M1
RDEC71H106K3	X7S (EIA)	50Vdc	10µF±10%	5.5×5.0	4.0	2.5	P1	S1
	X7S (EIA)	50Vdc	10µF±10%	5.5×5.0	4.0	5.0	K1	M1
	. ,	50Vdc	22µF±20%	5.5×7.5	4.0	5.0	K1	M1
	X7R (EIA)	100Vdc	220pF±10%	4.0×3.5	2.5	5.0	K1	M1
	X7R (EIA)	100Vdc	220pF±10%	5.0×3.5	2.5	2.5	P1	S1
	X7R (EIA)	100Vdc	330pF±10%	4.0×3.5	2.5	5.0 2.5	K1	M1
	X7R (EIA)	100Vdc	330pF±10%	5.0×3.5	2.5	2.5 E.O	P1	S1
	X7R (EIA)	100Vdc	470pF±10%	4.0×3.5	2.5	5.0 2 E	K1	M1
	X7R (EIA)	100Vdc	470pF±10%	5.0×3.5	2.5 2.5	2.5	P1	S1 M1
RDER72A681K0 H03 RDER72A681K0 H03	X7R (EIA)	100Vdc 100Vdc	680pF±10%	4.0×3.5 5.0×3.5	2.5	5.0 2.5	K1 P1	
RDER72A681K0H03	X7R (EIA) X7R (EIA)	100Vdc 100Vdc	680pF±10% 1000pF±10%	4.0×3.5	2.5	5.0	K1	
RDER72A102K0H03_	X7R (EIA) X7R (EIA)	100Vdc 100Vdc	1000pF±10% 1000pF±10%	5.0×3.5	2.5	2.5	P1	
RDER72A102K0H03	X7R (EIA)	100Vdc	1500pF±10%	4.0×3.5	2.5	5.0	K1	 M1
	ATR (EIA)	100 vuc	1300hi 710 %	T.UAJ.J	2.5			

4



Capacitance

Dimensions LxW

(mm)

Part Number

Temp. Char. Rated

Voltage

	C49E.pdf	
	Nov. 19,2019	
yle	Lead Style Code	
	Taping	
	raping	

S1 M1

S1

M1

S1

Μ1

S1

Μ1

S1

M1

S1 S1

M1

M1

S1

M1

S1

Μ1

S1

S1

M1

S1

M1

S1

M1

S1

Μ1

M1

M1

M1

M1

Μ1

M1

Μ1

M1

M1

M1

Μ1

M1

Μ1

M1

M1

M1

M1

M1

Lead Space F

(mm)

Lead St Code

Bulł

Dimension

(mm)

				(mm)	(mm)	(mm)	Βυικ	
RDER72A152K0 H03	X7R (EIA)	100Vdc	1500pF±10%	5.0×3.5	2.5	2.5	P1	
RDER72A222K0 H03	X7R (EIA)	100Vdc	2200pF±10%	4.0×3.5	2.5	5.0	K1	
RDER72A222K0 H03	X7R (EIA)	100Vdc	2200pF±10%	5.0×3.5	2.5	2.5	P1	
RDER72A332K0 H03	X7R (EIA)	100Vdc	3300pF±10%	4.0×3.5	2.5	5.0	K1	
RDER72A332K0 H03	X7R (EIA)	100Vdc	3300pF±10%	5.0×3.5	2.5	2.5	P1	
RDER72A472K0 H03	X7R (EIA)	100Vdc	4700pF±10%	4.0×3.5	2.5	5.0	K1	-
RDER72A472K0 H03	X7R (EIA)	100Vdc	4700pF±10%	5.0×3.5	2.5	2.5	P1	
RDER72A682K0 H03	X7R (EIA)	100Vdc	6800pF±10%	4.0×3.5	2.5	5.0	K1	
RDER72A682K0 H03	X7R (EIA)	100Vdc	6800pF±10%	5.0×3.5	2.5	2.5	P1	
RDER72A103K0 H03	X7R (EIA)	100Vdc	10000pF±10%	4.0×3.5	2.5	5.0	K1	
RDER72A103K0 H03	X7R (EIA)	100Vdc	10000pF±10%	5.0×3.5	2.5	2.5	P1	-
RDER72A153K0 H03	X7R (EIA)	100Vdc	15000pF±10%	4.0×3.5	2.5	5.0	K1	
RDER72A153K0 H03	X7R (EIA)	100Vdc	15000pF±10%	5.0×3.5	2.5	2.5	P1	
RDER72A223K0 H03	X7R (EIA)	100Vdc	22000pF±10%	4.0×3.5	2.5	5.0	K1	
RDER72A223K0 H03	X7R (EIA)	100Vdc	22000pF±10%	5.0×3.5	2.5	2.5	P1	
RDER72A333K1 H03	X7R (EIA)	100Vdc	33000pF±10%	4.5×3.5	3.15	5.0	K1	
RDER72A333K1 H03	X7R (EIA)	100Vdc	33000pF±10%	5.0×3.5	3.15	2.5	P1	-
RDER72A473K1 H03	X7R (EIA)	100Vdc	47000pF±10%	4.5×3.5	3.15	5.0	K1	-
RDER72A473K1 H03	X7R (EIA)	100Vdc	47000pF±10%	5.0×3.5	3.15	2.5	P1	-
RDER72A683K1 H03	X7R (EIA)	100Vdc	68000pF±10%	4.5×3.5	3.15	5.0	K1	-
RDER72A683K1 H03	X7R (EIA)	100Vdc	68000pF±10%	5.0×3.5	3.15	2.5	P1	-
RDER72A104K1 H03	X7R (EIA)	100Vdc	0.1µF±10%	4.5×3.5	3.15	5.0	K1	-
RDER72A104K1	X7R (EIA)	100Vdc	0.1µF±10%	5.0×3.5	3.15	2.5	P1	
RDER72A154K2 H03	X7R (EIA)	100Vdc	0.15µF±10%	5.5×4.0	3.15	2.5	P1	
RDER72A154K2 H03	X7R (EIA)	100Vdc	0.15µF±10%	5.5×4.0	3.15	5.0	K1	
RDER72A224K1 H03	X7R (EIA)	100Vdc	0.22µF±10%	4.5×3.5	3.15	5.0	K1	
RDER72A224K1 H03	X7R (EIA)	100Vdc	0.22µF±10%	5.0×3.5	3.15	2.5	P1	
RDER72A334K1 H03	X7R (EIA)	100Vdc	0.33µF±10%	4.5×3.5	3.15	5.0	K1	
RDER72A334K1 H03	X7R (EIA)	100Vdc	0.33µF±10%	5.0×3.5	3.15	2.5	P1	
RDER72A474K1 H03	X7R (EIA)	100Vdc	0.47µF±10%	4.5×3.5	3.15	5.0	K1	
RDER72A474K1 H03	X7R (EIA)	100Vdc	0.47µF±10%	5.0×3.5	3.15	2.5	P1	
RDER72A684K2 H03	X7R (EIA)	100Vdc	0.68µF±10%	5.5×4.0	3.15	2.5	P1	
RDER72A684K2 H03	X7R (EIA)	100Vdc	0.68µF±10%	5.5×4.0	3.15	5.0	K1	
RDER72A105K2 H03	X7R (EIA)	100Vdc	1.0µF±10%	5.5×4.0	3.15	2.5	P1	
RDER72A105K2 H03	X7R (EIA)	100Vdc	1.0µF±10%	5.5×4.0	3.15	5.0	K1	
RDEC72A155K3	X7S (EIA)	100Vdc	1.5µF±10%	5.5×5.0	4.0	2.5	P1	
RDEC72A155K3	X7S (EIA)	100Vdc	1.5µF±10%	5.5×5.0	4.0	5.0	K1	
RDEC72A225K3 H03	X7S (EIA)	100Vdc	2.2µF±10%	5.5×5.0	4.0	2.5	P1	
RDEC72A225K3	X7S (EIA)	100Vdc	2.2µF±10%	5.5×5.0	4.0	5.0	K1	
RDEC72A475MW	X7S (EIA)	100Vdc	4.7µF±20%	5.5×7.5	4.0	5.0	K1	
RDER72E102K1	X7R (EIA)	250Vdc	1000pF±10%	4.5×3.5	3.15	5.0	K1	
RDER72E152K1	X7R (EIA)	250Vdc	1500pF±10%	4.5×3.5	3.15	5.0	K1	
RDER72E222K1	X7R (EIA)	250Vdc	2200pF±10%	4.5×3.5	3.15	5.0	K1	
RDER72E332K1	X7R (EIA)	250Vdc	3300pF±10%	4.5×3.5	3.15	5.0	K1	
RDER72E472K1	X7R (EIA)	250Vdc	4700pF±10%	4.5×3.5	3.15	5.0	K1	
RDER72E682K1	X7R (EIA)	250Vdc	6800pF±10%	4.5×3.5	3.15	5.0	K1	
RDER72E103K1	X7R (EIA)	250Vdc	10000pF±10%	4.5×3.5	3.15	5.0	K1	
RDER72E153K1	X7R (EIA)	250Vdc	15000pF±10%	4.5×3.5	3.15	5.0	K1	
RDER72E223K1 H03	X7R (EIA)	250Vdc	22000pF±10%	4.5×3.5	3.15	5.0	K1	
RDER72E333K2 H03	X7R (EIA)	250Vdc	33000pF±10%	5.5×4.0	3.15	5.0	K1	
RDER72E473K2 H03	X7R (EIA)	250Vdc	47000pF±10%	5.5×4.0	3.15	5.0	K1	
RDER72E683K2 H03	X7R (EIA)	250Vdc	68000pF±10%	5.5×4.0	3.15	5.0	K1	
RDER72E104K2 H03	X7R (EIA)	250Vdc	0.10µF±10%	5.5×4.0	3.15	5.0	K1	
RDER72E154K3 H03	X7R (EIA)	250Vdc	0.15µF±10%	5.5×5.0	3.15	5.0	K1	
RDER72E224K3 H03	X7R (EIA)	250Vdc	0.22µF±10%	5.5×5.0	3.15	5.0	K1	
RDER72E334K4 H03	X7R (EIA)	250Vdc	0.33µF±10%	7.5×5.5	4.0	5.0	K1	
				7 5 5 5	4.0	F O	1/4	1

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K1



 $0.47 \mu F \pm 10\%$

7.5×5.5

4.0

5.0

RDER72E474K4 H03

X7R (EIA)

250Vdc

Continued from the preceding page. \searrow

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Part Number	Temp.	Rated	Capacitance	Dimensions LxW	Dimension T	Lead Space	Lead Style Code	Lead Style Code
Fait Number	Char.	Voltage	Capacitance	(mm)	(mm)	(mm)	Bulk	Taping
RDER72E684K5	X7R (EIA)	250Vdc	0.68µF±10%	7.5×7.5	4.0	5.0	B1	E1
RDER72E105K5	X7R (EIA)	250Vdc	1.0µF±10%	7.5×7.5	4.0	5.0	B1	E1
RDER72E225MU H03	X7R (EIA)	250Vdc	2.2µF±20%	7.7×12.5	4.0	5.0	B1	E1
RDER72H102K1 H03	X7R (EIA)	500Vdc	1000pF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER72H152K1 H03	X7R (EIA)	500Vdc	1500pF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER72H222K1 H03	X7R (EIA)	500Vdc	2200pF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER72H332K1 H03	X7R (EIA)	500Vdc	3300pF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER72H472K1 H03	X7R (EIA)	500Vdc	4700pF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER72H682K1 H03	X7R (EIA)	500Vdc	6800pF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER72H103K1	X7R (EIA)	500Vdc	10000pF±10%	4.5×3.5	3.15	5.0	K1	M1
RDER72H153K2 H03	X7R (EIA)	500Vdc	15000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER72H223K2 H03	X7R (EIA)	500Vdc	22000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER72H333K2 H03	X7R (EIA)	500Vdc	33000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER72H473K2 H03	X7R (EIA)	500Vdc	47000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER72H683K3 H03	X7R (EIA)	500Vdc	68000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RDER72H104K3 H03	X7R (EIA)	500Vdc	0.1µF±10%	5.5×5.0	4.0	5.0	K1	M1
RDER72H154K4 H03	X7R (EIA)	500Vdc	0.15µF±10%	7.5×5.5	4.0	5.0	K1	M1
RDER72H224K4 H03	X7R (EIA)	500Vdc	0.22µF±10%	7.5×5.5	4.0	5.0	K1	M1
RDER72H334K5 H03	X7R (EIA)	500Vdc	0.33µF±10%	7.5×7.5	4.0	5.0	B1	E1
RDER72H474K5 H03	X7R (EIA)	500Vdc	0.47µF±10%	7.5×7.5	4.0	5.0	B1	E1
RDER72H684MU H03	X7R (EIA)	500Vdc	0.68µF±20%	7.7×12.5	4.0	5.0	B1	E1
RDER72H105MU H03	X7R (EIA)	500Vdc	1.0µF±20%	7.7×12.5	4.0	5.0	B1	E1
RDER72J102K2 H03	X7R (EIA)	630Vdc	1000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER72J152K2 H03	X7R (EIA)	630Vdc	1500pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER72J222K2 H03	X7R (EIA)	630Vdc	2200pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER72J332K2 H03	X7R (EIA)	630Vdc	3300pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER72J472K2 H03	X7R (EIA)	630Vdc	4700pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER72J682K2 H03	X7R (EIA)	630Vdc	6800pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER72J103K2 H03	X7R (EIA)	630Vdc	10000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER72J153K2 H03	X7R (EIA)	630Vdc	15000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER72J223K2 H03	X7R (EIA)	630Vdc	22000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER72J333K3 H03	X7R (EIA)	630Vdc	33000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RDER72J473K3 H03	X7R (EIA)	630Vdc	47000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RDER72J683K4 H03	X7R (EIA)	630Vdc	68000pF±10%	7.5×5.5	4.0	5.0	K1	M1
RDER72J104K4 H03	X7R (EIA)	630Vdc	0.10µF±10%	7.5×5.5	4.0	5.0	K1	M1
RDER72J154K5 H03	X7R (EIA)	630Vdc	0.15µF±10%	7.5×8.0	4.0	5.0	B1	E1
RDER72J224K5 H03	X7R (EIA)	630Vdc	0.22µF±10%	7.5×8.0	4.0	5.0	B1	E1
RDER72J474MU	X7R (EIA)	630Vdc	0.47µF±20%	7.7×13.0	4.0	5.0	B1	E1
RDER73A471K2 H03	X7R (EIA)	1000Vdc	470pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER73A681K2 HO3	X7R (EIA)	1000Vdc	680pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER73A102K2	X7R (EIA)	1000Vdc	1000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER73A152K2 HO3	X7R (EIA)	1000Vdc	1500pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER73A222K2 HO3	X7R (EIA)	1000Vdc	2200pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER73A332K2 HO3	X7R (EIA)	1000Vdc	3300pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER73A472K2 H03	X7R (EIA)	1000Vdc	4700pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER73A682K2 HO3	X7R (EIA)	1000Vdc	6800pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER73A103K2 H03	X7R (EIA)	1000Vdc	10000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDER73A153K3 H03	X7R (EIA)	1000Vdc	15000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RDER73A223K3 H03	X7R (EIA)	1000Vdc	22000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RDER73A333K4 H03	X7R (EIA)	1000Vdc	33000pF±10%	7.5×5.5	4.0	5.0	K1	M1
RDER73A473K4 H03	X7R (EIA)	1000Vdc	47000pF±10%	7.5×5.5	4.0	5.0	K1	M1
RDER73A683K5	X7R (EIA)	1000Vdc	68000pF±10%	7.5×8.0	4.0	5.0	B1	E1
RDER73A104K5	X7R (EIA)	1000Vdc	0.10µF±10%	7.5×8.0	4.0	5.0	B1	E1
RDER73A224MU	X7R (EIA)	1000Vdc	0.22µF±20%	7.7×13.0	4.0	5.0	B1	E1

Two blank columns are filled with the lead style code. Please refer to the 3 columns on the right for the appropriate code.

The last blank column is filled with the packaging code. (B: bulk, A: ammo pack)

muRata

C49E.pdf Nov. 19,2019

Specifications and Test Methods

No.	lte		s	Specifi	cations	Test Method
140.	100		Temperature Compensating	; Туре	High Dielectric Constant Type	restriction
1	Operating Ter Range	nperature	-55 to +125°C		Char. X7R, X7S: -55 to +125°C	-
2	Appearance		No defects or abnormalitie	es	1	Visual inspection
3	Dimension an	d Marking	See previous pages			Visual inspection, Vernier Caliper
		Between Terminals	No defects or abnormalitie	es		$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$
4	Dielectric Strength Body Insulation No defects or abnormalities			The capacitor is placed in a container with metal balls of 1mm diameter so that each terminal, short-circuited, is kept approximately 2mm from the balls as shown in the figure, for 1 to 5s between capacitor terminals and metal balls. (Charge/Discharge current ≦ 50mA) Rated Voltage Test Voltage DC25V,DC50V,DC100V 250% of the rated voltage DC250V,DC500V 200% of the rated voltage DC30V, DC1kV DC1300V		
5	Insulation Resistance	Between Terminals	More than 10000M or 500MΩ • μF (Whichever is smaller)	High Dielectric Constant Type Rated voltage: DC25V, DC50V, DC100V More than 10000M or 500MΩ • μF (Whichever is smaller) Rated voltage: DC250V, DC500V, DC630V, DC1kV More than 10000M or 100MΩ • μF (Whichever is smaller)		The insulation resistance should be measured with a DC voltage not exceeding the rated voltage (DC500V in case of rated vlotage: DC500V, DC630V, DC1kV) at normal temperature and humidity and within 2min of charging. (Charge/Discharge current ≤ 50mA)
6	Capacitance		Within the specified tolera	ance		The capacitance, Q/D.F. should be measured at 25°C
7			30pF min.: Q ≧ 1000 30pF max.: Q ≧ 400+20C C: Nominal capacitance (p	Char. X7R: 0.025 max. Char. X7S: 0.125 max		$\label{eq:starting} \begin{array}{ c c c c c } at the frequency and voltage shown in the table. \\ \hline Nominal Cap. Frequency Voltage \\ \hline C \leq 1000 pF & 1\pm 0.1 MHz & AC0.5 to 5V (r.m.s.) \\ \hline 10 \mu F \geqq C > 1000 pF & 1\pm 0.1 kHz & AC1\pm 0.2V (r.m.s.) \\ \hline C > 10 \mu F & 120\pm 24 Hz & AC0.5\pm 0.1V (r.m.s.) \\ \hline \end{array}$

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Specifications and Test Methods

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				Sp <u>ecif</u> i	cations				
No.	lte	m	Temperat	ture Compensating Type	High Dielectric Constant Type	-	Test Method		
8	Capacitance Temperature Characteristics						The capacitance change should be measured after 5 min at each specified temperature stage. The temperature coefficient is determined using the capacitance measured in step 3 as a reference. When cycling the temperature sequentially from step 1 through 5 (-55 to +125°C) the capacitance should be within the specified tolerance for the temperature coefficient and capacitance change. $\begin{array}{r c c c c c c c c c c c c c c c c c c c$		
						Perform a heat tre	atment at 150+0/-10°C for 1h, and a temperature for 24±2h.		
9	Tensile Strength Strength		Termina	tion not to be broken or	loosened	As in the figure, fix the capacitor body, apply the force gradually to each lead in the radial direction of the capacitor until reaching 10N and then keep the force applied for 10±1s.			
		Bending Strength	Termina	tion not to be broken or	loosened	Each lead wire should be subjected to a force of 2.5N and then bent 90° at the point of egress in one direction. Each wire is then returned to the original position and bent 90° in the opposite direction at the rate of one bend per 2 to 3s.			
		Appearance	No defe	cts or abnormalities		The capacitor should be firmly soldered to the			
	Vibration	Capacitance	Within t	he specified tolerance		 supporting lead wire and vibrated at a frequency ran of 10 to 55Hz, 1.5mm in total amplitude, with about 1 minute rate of vibration change from 10 to 55Hz and back to 10Hz. Apply for a total of 6h, 2h each in 3 mutually perpendicular directions. 			
10	Resistance	Q/D.F.	30pF ma	n.: Q ≧ 1000 ax.: Q ≧ 400+20C nal capacitance (pF)	Char. X7R: 0.025 max. Char. X7S: 0.125 max.				
11	1 Solderability of Leads			Lead wire should be soldered with uniform coating on the axial direction over 3/4 of the circumferential direction.			apacitor is dipped into a 25% ethanol ion of rosin (JIS-K-5902) and older for 2±0.5s. In both cases the up to about 1.5 to 2mm from the ±5°C Lead Free Solder (Sn-3.0Ag-0.5Cu) ±5°C H60A or H63A Eutectic Solder		
	Resistance to Soldering Hea	[asured and observed cha ations in the following ta	aracteristics should satisfy the able.	solder 1.5 to 2.0m	uld be immersed in the melted m from the root of terminal at		
	(Non-Preheat)	Appearance	No defe	cts or abnormalities		260±5°C for 10±1 Pre-treatment	S.		
12 ' 1		Capacitance Change		2.5% or ±0.25pF ver is larger)	Char. X7R: Within ±7.5% Char. X7S: Within ±10%	Capacitor should l then place at room	be stored at 150+0/-10°C for 1h, n temperature for 24±2h		
÷		Dielectric Strength (Between Terminals)	No defeo	cts		before initial measurement. (For Char. X7R, X7S) Post-treatment Capacitor should be stored for 24±2h at room condition*.			

* "room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

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۱o.	Ite	2	Specifi	cations		Test Method			
۹ 0 .	Itel	n	Temperature Compensating Type	High Dielectric Constant Type		Test Method			
	Resistance to Soldering Heat	:	The measured and observed cha specifications in the following ta		First the c 60+0/-5s	apacitor should be stored at 1	20+0/-5°C for		
	(On-Preheat)	Appearance	No defects or abnormalities			lead wires should be immersed to 2.0mm from the root of ter			
12		Capacitance Change	Within ±2.5% or ±0.25pF (Whichever is larger)	Char. X7R: Within ±7.5% Char. X7S: Within ±10%	260±5°C Pre-treatr	for 7.5+0/-1s. ment			
2		Dielectric Strength (Between Terminals)	No defects		then plac initial me Post-trea	r should be stored for 24±2h a	±2h before S)		
	Resistance to Soldering Heat	:	The measured and observed cha specifications in the following ta		Test condition Temperrature of iron-tip: 350±10°C				
	(Soldering Iron Method)	Appearance	No defects or abnormalities		Soldering Soldering	time: 3.5±0.5s.			
12	inon ricchody	Capacitance Change	Within ±2.5% or ±0.25pF (Whichever is larger)	Char. X7R: Within ±7.5% Char. X7S: Within ±10%	Straight L Crimp Lea	lead: 1.5 to 2.0mm from the ro ad: 1.5 to 2.0mm from the end			
3		Dielectric Strength (Between Terminals)	No defects		Pre-treatment Capacitor should be stored at 150+0/-10°C then place at room temperature for 24±2h k initial measurement. (For Char. X7R, X7S) Post-treatment Capacitor should be stored for 24±2h at roo condition*.				
		Appearance	No defects or abnormalities						
		Capacitance Change	Within ±5% or ±0.5pF (whichever is larger)	Char. X7R, X7S: Within ±12.5%	cycles.	itor should be subjected to 5 t			
			30pF min.: Q ≧ 350		Set for 24±2h at room temperature, then measure.				
13	Temperature	Q/D.F.	10pF to 30pF: Q ≧ 275+5C/2 10pF max.: Q ≧ 200+10C C: Nominal capacitance (pF)	Char. X7R: 0.05 max. Char. X7S: 0.2 max.	Step 1 2	Temperature (°C) Min. Operating Temp. ±3 Room Temp.	Time (min) 30±3 3 max.		
	Cycle	Insulation Resistance	1000MΩ, 50MΩ • μF min. (which	never is smaller)	3	Max. Operating Temp. ±3 Room Temp.	30±3 3 max.		
		Dielectric Strength (Between Terminals)	No defects or abnormalities		Perform a	ment (for high dielectric const heat treatment at 150+0/-10 t at room temperature for 24±	°C for 1h, and		
		Appearance	No defects or abnormalities						
		Capacitance Change	Within ±5% or ±0.5pF (whichever is larger)	Char. X7R, X7S: Within ±12.5%		pacitor at 40±2°C and relative 6 for 500^{+24}_{-20} h.	e humidity of		
14	Humidity (Steady State)	Q/D.F.	30pF min.: Q \ge 350 10pF to 30pF: Q \ge 275+5C/2 10pF max.: Q \ge 200+10C C: Nominal capacitance (pF)	Char. X7R: 0.05 max. Char. X7S: 0.2 max.	 Remove and set for 24±2h at room temperat measure. Pretreatment (for high dielectric constant ty Perform a heat treatment at 150+0/-10°C for 				
		Insulation Resistance	1000MΩ, 50MΩ • μF min. (which	never is smaller)		t at room temperature for 24±			
		Appearance	No defects or abnormalities		Annahatha		10 - 200l		
		Capacitance Change	Within ±5% or ±0.5pF (whichever is larger)	Char. X7R, X7S: Within ±12.5%	in 90 to 9	rated voltage for 500 ⁺²⁴ h at 5% humidity. nd set for 24±2h at room temj			
15	5 Humidity Load	Q/D.F.	30pF min.: Q ≧ 200 30pF max.: Q ≧ 100+10C/3 C: Nominal capacitance (pF)	Char. X7R: 0.05 max. Char. X7S: 0.2 max.	measure. (Charge/E • Pretreat				
					Perform a heat treatment at 150+0/-10°C for 1h, and then let sit at room temperature for 24±2h.				

* "room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

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No.	lter		Specifi	cations	Test Method				
INO.	Iter	m	Temperature Compensating Type	High Dielectric Constant Type		i est Met	ποα		
		Appearance	No defects or abnormalities		Apply voltage in Table for 1000 ⁺⁴⁸ _O h at the				
		Capacitance Change	Within ±3% or ±0.3pF	Char. X7R, X7S:	 maximum operating temperature±3°C. Remove and set for 24±2h at room temperature, then measure. (Charge/Discharge current ≤ 50mA) 				
			(whichever is larger)	Within ±12.5%		Rated Voltage	Test Voltage		
	High				Temperature Compensating	DC50V, DC100V, DC250V	150% of the rated voltage		
16	Temperature		30pF min.: Q ≧ 350	Char. X7R: 0.04 max. Char. X7S: 0.2 max.	Туре	DC630V, DC1kV	120% of the rated voltage		
	Load	Q/D.F.	10pF to 30pF: Q ≧ 275+5C/2 10pF max.: Q ≧ 200+10C C: Nominal capacitance (pF)		High Dielectric Constant Type	DC25V, DC50V, DC100V, DC250V	150% of the rated voltage		
				Char. X75: 0.2 max.		DC500V, DC630V	120% of the rated voltage		
			C. Norminal capacitance (pr)			DC1kV	110% of the rated voltage		
		Insulation Resistance	1000MΩ, 50MΩ • μF min. (which	ever is smaller)	 Pretreatment (for high dielectric constant type) Appy test voltage for 1h at test temperature. Remove and set for 24±2h at room temperature. 				
		Appearance	No defects or abnormalities		The capacitor should be fully immersed, unagitated, in reagent at 20 to 25°C for 30±5s and then removed gently. Marking on the surface of the capacitor should immediately be visually examined. Reagent: • Isopropyl alcohol				
17	17 Solvent Resistance	Marking	Legible						

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Leaded MLCC for General Purpose

RDE Series Large Capacitance and High Allowable Ripple Current (DC250V-DC630V)

Features

- 1. Higher capacitance with DC-Bias; approximately 40% higher than X7R under loaded rated voltage.
- 2. Meet LF (Lead Free) and HF (Halogen Free)
- 3. Allowable higher ripple current
- 4. Reduces acoustic noise

Approximately 15dB reduction in comparison to leaded X7R characteristics parts. Approximately 30dB reduction in comparison to SMD X7R characteristics part because the contact area is smaller than a SMD.

Applications

- 1. DC smoothing capacitor for LED bulb
- 2. PFC capacitor for general use SMPS
- 3. Replace Al-E capacitor for long-life equipment

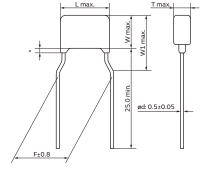
Dimensions

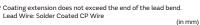
5

Dimensions and	DC Rated	Dimensions (mm)							
Lead Style Code	Voltage	L	w	W1	Т	F	d		
2K1/2M1	250V/450V/630V	5.5	4.0	6.0		5.0	0.5		
3K1/3M1	250V/450V/630V	5.5	5.0	7.5	See	5.0	0.5		
4K1/4M1	250V/450V/630V	7.5	5.5	8.0	the individual product	5.0	0.5		
5B1/5E1	250V/450V/630V	7.5	7.5*	-	specification	5.0	0.5		
UB1/UE1	250V/450V/630V	7.7	12.5*	-		5.0	0.5		

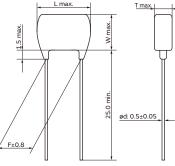
*DC630V: W+0.5mm











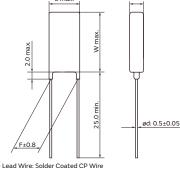
Dimensions code: 5 Lead style code: B1

· Lead Wire: Solder Coated CP Wire

(in mm)

Dimensions code: U

Lead style code: B1



(in mm)

Marking

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Rated Voltage	DC250V	DC450V	DC630V			
Dimensions Temp. Char.		Х7Т				
2	(CH 683) K47	(C: 153 K97	(CH 153)			
3, 8	((<u>)</u> 334 K47	(() 104 K97	(C1223) K77)			
5, U	(M 225 M47)	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	(474 M77)			
Temperature Characteristics	Marked with code (X7T char.: 7)		<u> </u>			
Nominal Capacitance	Marked with 3 figures					
Capacitance Tolerance	Marked with code					
Rated Voltage	Marked with code (DC250V: 4, D	C450V: 9, DC630V: 7)				
Manufacturer's Identification	Marked with 🕅					

High Dielectric Constant Type, X7T Characteristics

Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RDED72E333K2 H03	X7T (EIA)	250Vdc	33000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDED72E473K2 H03	X7T (EIA)	250Vdc	47000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDED72E683K2 H03	X7T (EIA)	250Vdc	68000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDED72E104K3 H03	X7T (EIA)	250Vdc	0.10µF±10%	5.5×5.0	4.0	5.0	K1	M1
RDED72E154K3	X7T (EIA)	250Vdc	0.15µF±10%	5.5×5.0	4.0	5.0	K1	M1
RDED72E224K4 H03	X7T (EIA)	250Vdc	0.22µF±10%	7.5×5.5	4.0	5.0	K1	M1
RDED72E334K4 H03	X7T (EIA)	250Vdc	0.33µF±10%	7.5×5.5	4.0	5.0	K1	M1
RDED72E474K5	X7T (EIA)	250Vdc	0.47µF±10%	7.5×7.5	4.5	5.0	B1	E1
RDED72E684K5	X7T (EIA)	250Vdc	0.68µF±10%	7.5×7.5	4.5	5.0	B1	E1
RDED72E105K5	X7T (EIA)	250Vdc	1.0µF±10%	7.5×7.5	4.5	5.0	B1	E1
RDED72E225MU	X7T (EIA)	250Vdc	2.2µF±20%	7.7×12.5	4.5	5.0	B1	E1
RDED72W103K2 H03	X7T (EIA)	450Vdc	10000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDED72W153K2 H03	X7T (EIA)	450Vdc	15000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDED72W223K2 H03	X7T (EIA)	450Vdc	22000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDED72W333K2 H03	X7T (EIA)	450Vdc	33000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDED72W473K2 H03	X7T (EIA)	450Vdc	47000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDED72W683K3 H03	X7T (EIA)	450Vdc	68000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RDED72W104K3 H03	X7T (EIA)	450Vdc	0.10µF±10%	5.5×5.0	4.0	5.0	K1	M1
RDED72W154K4 H03	X7T (EIA)	450Vdc	0.15µF±10%	7.5×5.5	4.0	5.0	K1	M1
RDED72W224K5	X7T (EIA)	450Vdc	0.22µF±10%	7.5×7.5	4.5	5.0	B1	E1
RDED72W334K5	X7T (EIA)	450Vdc	0.33µF±10%	7.5×7.5	4.5	5.0	B1	E1
RDED72W474K5	X7T (EIA)	450Vdc	0.47µF±10%	7.5×7.5	4.5	5.0	B1	E1
RDED72W564K5	X7T (EIA)	450Vdc	0.56µF±10%	7.5×7.5	4.5	5.0	B1	E1
RDED72W105MU	X7T (EIA)	450Vdc	1.0µF±20%	7.7×12.5	4.5	5.0	B1	E1
RDED72W125MU	X7T (EIA)	450Vdc	1.2µF±20%	7.7×12.5	4.5	5.0	B1	E1
RDED72J103K2 H03	X7T (EIA)	630Vdc	10000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDED72J153K2 H03	X7T (EIA)	630Vdc	15000pF±10%	5.5×4.0	3.15	5.0	K1	M1
RDED72J223K3 H03	X7T (EIA)	630Vdc	22000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RDED72J333K3 H03	X7T (EIA)	630Vdc	33000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RDED72J473K3 H03	X7T (EIA)	630Vdc	47000pF±10%	5.5×5.0	4.0	5.0	K1	M1
RDED72J683K4 H03	X7T (EIA)	630Vdc	68000pF±10%	7.5×5.5	4.0	5.0	K1	M1
RDED72J104K5 H03	X7T (EIA)	630Vdc	0.10µF±10%	7.5×8.0	4.5	5.0	B1	E1
RDED72J154K5 H03	X7T (EIA)	630Vdc	0.15µF±10%	7.5×8.0	4.5	5.0	B1	E1
RDED72J224K5 H03	X7T (EIA)	630Vdc	0.22µF±10%	7.5×8.0	4.5	5.0	B1	E1

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Part Number	Temp. Char.	Rated Voltage	Capacitance	Dimensions LxW (mm)	Dimension T (mm)	Lead Space F (mm)	Lead Style Code Bulk	Lead Style Code Taping
RDED72J274K5	X7T (EIA)	630Vdc	0.27µF±10%	7.5×8.0	4.5	5.0	B1	E1
RDED72J474MU	X7T (EIA)	630Vdc	0.47µF±20%	7.7×13.0	4.5	5.0	B1	E1
RDED72J564MU	X7T (EIA)	630Vdc	0.56µF±20%	7.7×13.0	4.5	5.0	B1	E1

Two blank columns are filled with the lead style code. Please refer to the 3 columns on the right for the appropriate code.

The last blank column is filled with the packaging code. (B: bulk, A: ammo pack)

No.	lte	m	Specifications		Test Method		
1	Operating Ter Range	nperature	-55 to +125°C		-		
2	Appearance		No defects or abnormalities	Visual inspection			
3	Dimension and	d Marking	See previous pages	Visual inspection,	Vernier Caliper		
		Between Terminals	No defects or abnormalities		Ild not be damaged when voltage between the terminations e current ≦ 50mA) Test Voltage 200% of the rated voltage 150% of the rated voltage 120% of the rated voltage		
4	Dielectric Strength Body Insulation		No defects or abnormalities	The capacitor is placed in a container with metal balls of 1mm diameter so that each terminal, short-circuit, is kept approximately 2mm from the balls as shown in the figure, and 200% of the rated DC voltage is impressed for 1 to 5s between capacitor terminals and metal balls. (Charge/Discharge current ≦ 50mA)			
5	Insulation Between Resistance Terminals		More than 10000MΩ or 100MΩ • $\mu F,$ Whichever is smaller	The insulation resistance should be measured with DC500V (DC250V in case of rated voltage: DC250V,DC450V) at normal temperature and humidity and within 2min of charging. (Charge/Discharge current ≦ 50mA)			
6	Capacitance		Within the specified tolerance		D.F. should be measured at the		
7	Dissipation Fa	ctor (D.F.)	0.01 max.	AC1±0.2V(r.m.s.).	LkHz and a voltage of		
8	Capacitance Temperature Characteristic	erature Within +22/-33%			hange should be measured after ified temperature stage. Temperature (°C) 25±2 -55±3 25±2 125±3 25±2 25±2		
9	Tensile Strength Strength		Termination not to be broken or loosened	gradually to each l	the capacitor body, apply the force ead in the radial direction of the ching 10N and then keep the force		
		Bending Strength	Termination not to be broken or loosened	Each lead wire should be subjected to a force of 2 and then bent 90° at the point of egress in one direction. Each wire is then returned to the origina position and bent 90° in the opposite direction at rate of one bend per 2 to 3s.			
		Appearance	No defects or abnormalities		uld be firmly soldered to the		
	Vibration	Capacitance	Within the specified tolerance		re and vibrated at a frequency range mm in total amplitude, with about a		
10	Resistance	D.F.	0.01 max.	1 minute rate of vi	bration change from 10 to 55Hz Apply for a total of 6h, 2h each in 3		

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No.	ltem		Specifications	Test Method					
11	Solderability o	f Leads	Lead wire should be soldered with uniform coating on the axial direction over 3/4 of the circumferential direction.	The terminal of a capacitor is dipped into a solutio ethanol (JIS-K-8101) and rosin (JIS-K-5902) (25% in weight proportion) and then into molten solder Z-3282) for 2±0.5s. In both cases the depth of dipping is up to about 1.5 to 2mm from the termin body. Temp. of solder: 245±5°C Lead Free Solder (Sn-3.0Ag-0 235±5°C H60A or H63A Eutectic Solde					
	Resistance to		The measured and observed characteristics should satisfy the	The lead wires should be immersed in the melted					
	Soldering Heat (Non-Preheat)		specifications in the following table.	solder 1.5 to	solder 1.5 to 2.0mm from the root of terminal at 260±5°C for 10±1s.				
12	(NOII-FIElleat)	Appearance	No defects or abnormalities	260±5°C for Pre-treatme					
' 1		Capacitance Change	Within ±10%	then place a	0/-10°C for 1h, 24±2h before				
		Dielectric Strength (Between Terminals)	No defects	initial measurement. Post-treatment Capacitor should be stored for 24±2h at room condition*.					
	Resistance to Soldering Heat		The measured and observed characteristics should satisfy the specifications in the following table.	First the capacitor should be stored at 120+0/-5°C for 60+0/-5s.					
	(On-Preheat)	Appearance	No defects or abnormalities	Then, the lead wires should be immersed in the melter solder 1.5 to 2.0mm from the root of terminal at					
12		Capacitance Change	Within ±10%	Pre-treatme	260±5°C for 7.5+0/-1s. Pre-treatment				
2		Dielectric Strength (Between Terminals)	No defects		0/-10°C for 1h, 24±2h before ?h at room				
	Resistance to Soldering Heat		The measured and observed characteristics should satisfy the specifications in the following table.	Test condition Temperature of iron-tip: 350±10°C					
	(Soldering Iron Method)	Appearance	No defects or abnormalities	Soldering tii Soldering po	me: 3.5±0.5s. sition				
12		Capacitance Change	Within ±10%	Straight Lea Crimp Lead	ne root of terminal. end of lead bend.				
3		Dielectric Strength (Between Terminals)	No defects	 Pre-treatment Capacitor should be stored at 150+0/-10°C for 2 then place at room temperature for 24±2h befor initial measurement. Post-treatment Capacitor should be stored for 24±2h at room condition*. 					
		Appearance	No defects or abnormalities	The capacitor should be subjected to 5 temperatur cycles. Step Temperature (°C) Time (min)					
	Temperature Cycle	Capacitance Change	Within ±12.5%						
		D.F.	0.01 max.	1 2	-55±3 Room Temp.	30±3 3 max.			
13		Insulation Resistance	More than 1000M Ω or 50M Ω \star μF (Whichever is smaller)	3 4	125±3 Room Temp.	30±3 3 max.			
		Dielectric Strength (Between Terminals)	No defects or abnormalities		etreatment form a heat treatment at 150+0/-10°C for I let sit at room temperature for 24±2h.				
	Humidity (Steady State)	Appearance	No defects or abnormalities		citor at 40±2°C and rela				
14		Capacitance Change	Within ±12.5%	90 to 95% for 500 ^{±2} 0 ⁴ h. Remove and set for 24±2h at room temperature, then measure. • Pretreatment Perform a heat treatment at 150+0/-10°C for 1h and then let sit at room temperature for 24±2h.					
14		D.F.	0.02 max.						
		Insulation Resistance	More than 1000M Ω or 50M Ω \star μF (Whichever is smaller)						
	Humidity Load	Appearance	No defects or abnormalities		Apply the rated voltage at 40±2°C and relative humidity of 90 to 95% for 500 ^{±2} 0 ⁴ h. Remove				
15		Capacitance Change	Within ±12.5%	for 24±2h at					
12		D.F.	0.02 max.	• Pretreatme	(Charge/Discharge current ≦ 50mA)				
		Insulation		 Pretreatment Perform a heat treatment at 150+0/-10°C for 1h and then let sit at room temperature for 24±2h. 					

* "room condition" Temperature: 15 to 35°C, Relative humidity: 45 to 75%, Atmosphere pressure: 86 to 106kPa

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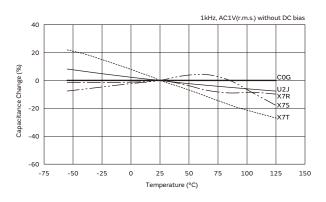


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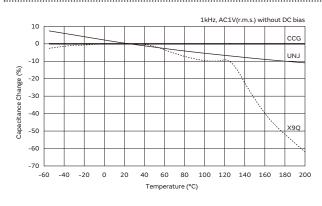
No.	ltem		Specifications	Test Method			
	High Temperature Load	Appearance	No defects or abnormalities	Apply voltage in Table for 1000 ⁺⁴⁸ _O h at the maximur			
		Capacitance Change	Within ±12.5%	operating temperature. Remove and set for 24±2h room temperature, then measure. (Charge/Discharge current ≦ 50mA) Rated Voltage Test Voltage			
		D.F.	0.02 max.				
16		Insulation Resistance	More than 1000MΩ or 50MΩ • μF (Whichever is smaller)	DC250V DC450V DC630V	150% of the rated voltage 130% of the rated voltage 120% of the rated voltage		
17	Solvent Resistance	Appearance Marking	No defects or abnormalities Legible	The capacitor should be fully immersed, unagitated, in reagent at 20 to 25°C for 30±5s and then removed gently. Marking on the surface of the capacitor should immediately be visually examined. Reagent : • Isopropyl alcohol			

Characteristics Reference Data (Typical Example)

Capacitance - Temperature Characteristics (RCE, RDE Series)

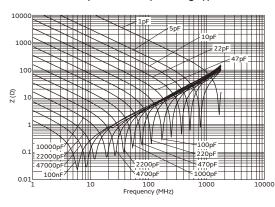


Capacitance - Temperature Characteristics (RHS Series)



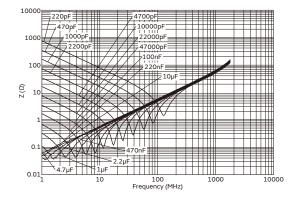
Impedance - Frequency Characteristics

Temperature Compensating Type

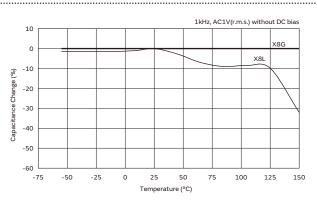


High Dielectric Constant Type

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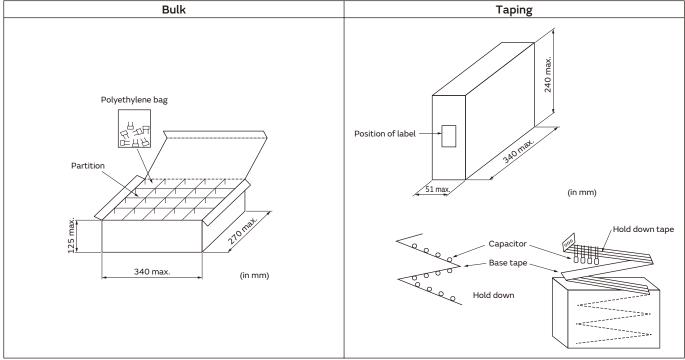


Capacitance - Temperature Characteristics (RHE Series)



Packaging

Packing Styles



Minimum Quantity

[Bulk]

Series	Dimensions Code	Minimum Quantity (pcs./Bag)*
RCE	Except for "U"	500
RCE	U	200
RHE	0, 1, 2, 3, W	500
RHS	0, 1, 2	500
RDE	Except for "U"	500
RDE	U	200

[Taping]

Series	Dimensions Code	Minimum Quantity (pcs./Ammo Pack)*		
	0, 1, 2	2000		
RCE	3	2000 or 1500		
	4, 5, U, W	1500		
DUE	0, 1, 2	2000		
RHE	3, W	1500		
PLIS	0, 1	2000		
RHS	2	1500		
	0, 1, 2	2000		
005	3	2000 or 1500		
RDE	4, 5, W	1500		
	U	1500 or 1000		

Please order with an integral multiple of the minimum quantity above.

*Minimum Quantity may change depends on part number.

Please check our website "Product details".

"Minimum Quantity" means the numbers of units of each delivery or order. The quantity should be an integral multiple of the "minimum quantity." (Please note that the actual delivery quantity in a package may change sometimes.)

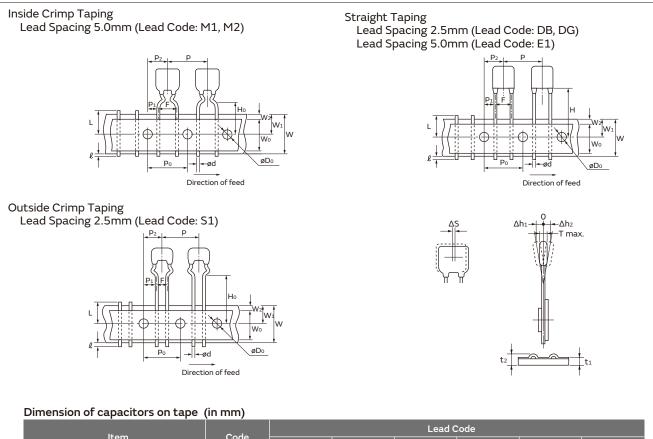
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Packaging

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Taping Dimensions



ltem	Code	Lead Code					
item	Code	DB	DG	E1	M1	M2	S1
Pitch of component	Р	12.7±1.0					
Pitch of sprocket hole	Po	12.7±0.2					
Lead spacing	F	2.5+0.4		5.0+0.6			2.5+0.4
Length from hole center to component center	P2			6.35	±1.3		
Length from hole center to lead	P1	5.1	±0.7		3.85±0.7		
Length non note center to lead		254±1.5 total length of componestspitch × 20					
Deviation along tape, left or right defect	ΔS			0±	2.0		
Carrier tape width	W			18.0	±0.5		
Position of sprocket hole	W1			9.0	+0 - 0.5		
Lead distance between reference and	Ho		- 16.0±0.5 20.0±0.5 16.0				16.0±0.5
bottom plane	Н	16.0±0.5	20.0±0.5	17.5±0.5		-	
Protrusion length	l			0.5 ו	max.		
Diameter of sprocket hole	Do	4.0±0.1					
Lead diameter	d	0.5±0.05					
Total tape thickness	t1	0.6±0.3					
Total thickness of tape and lead wire	t2			1.5 (max.		
Body thickness	Т			Depends on	Part Number		
Deviation	Δh1	1.0 max.					
Deviation across tape	Δh2	(Dimension code W, U: 2.0 max.)					
Portion to cut in case of defect	L	11.0+0 -1.0					
Hold down tape width	Wo			9.5	min.		
Hold down tape position	W2			1.5:	±1.5		

Caution

⚠ Caution (Storage and Operating Condition)

Operating and storage environment The insulating coating of capacitors does not form a perfect seal; therefore, do not use or store capacitors in a corrosive atmosphere, especially where chloride gas, sulfide gas, acid, alkali, salt or the like are present. Also avoid exposure to moisture. Before cleaning, bonding or molding this product, verify that these processes do not affect product quality by testing the performance of a cleaned, bonded or molded product in the intended

Caution (Rating)

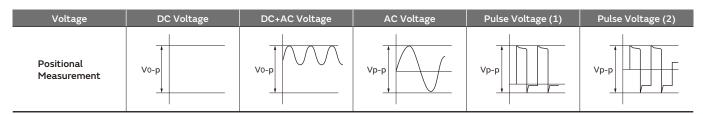
1. Operating Voltage

When DC-rated capacitors are to be used in AC or ripple current circuits, be sure to maintain the Vp-p value of the applied voltage or the V0-p which contains DC bias within the rated voltage range.

When the voltage is applied to the circuit, starting or stopping may generate irregular voltage for a transit period because of resonance or switching. Be sure to use a capacitor with a rated voltage range that includes these irregular voltages. equipment. Store the capacitors where the temperature and relative humidity do not exceed 5 to 40 degrees centigrade and 20 to 70%. Use capacitors within 6 months after delivery.

FAILURE TO FOLLOW THE ABOVE CAUTIONS MAY RESULT, WORST CASE, IN A SHORT CIRCUIT AND CAUSE FUMING OR PARTIAL DISPERSION WHEN THE PRODUCT IS USED.

When DC-rated capacitors are to be used in input circuits from commercial power source (AC filter), be sure to use Safety Recognized Capacitors because various regulations on withstand voltage or impulse withstand established for all equipment should be taken into consideration.



2. Operating Temperature

Keep the surface temperature of a capacitor below the upper limit of its rated operating temperature range. Be sure to take into account the heat generated by the capacitor itself (Please refer to the following column 3) and by peripheral components.

3. Self-generated Heat

When the capacitor is used in a high-frequency current, pulse current or similar current, it may have self-generated heat due to dielectric loss. In the case of "High Dielectric Constant Type Capacitors", applied voltage load should be such that self-generated heat is within 20 °C under the condition where the capacitor is subjected at an atmosphere temperature of 25 °C. Excessive heat may lead to deterioration of the capacitor's characteristics and reliability.

Please contact us if self-generated heat occurs with "Temperature Compensating Type Capacitors".

4. Measurement of Temperature

The surface temperature of capacitor should be measured under the condition where an atmosphere

temperature and a heat from peripheral components are stable.

The self-generated heat should be measured under the conditions where the capacitor is subjected at an atmosphere temperature 25°C and is not affected by radiant heat from other components or wind from surroundings.

When measuring, use a thermocouple of small thermal capacity -K of ø0.1mm.

Never attempt to perform measurement with the cooling fan running. Otherwise, accurate measurement cannot be ensured.

5. Fail-Safe

Be sure to provide an appropriate fail-safe function on your product to prevent a second damage that may be caused by the abnormal function or the failure of our product.

FAILURE TO FOLLOW THE ABOVE CAUTIONS MAY RESULT, WORST CASE, IN A SHORT CIRCUIT AND CAUSE FUMING OR PARTIAL DISPERSION WHEN THE PRODUCT IS USED.



①Caution

ACaution (Soldering and Mounting)

1. Vibration and impact

Do not expose a capacitor or its leads to excessive shock or vibration during use.

2. Soldering

When soldering this product to a PCB/PWB, do not exceed the solder heat resistance specification of the capacitor. Subjecting this product to excessive heating could melt the internal junction solder and may result in thermal shocks that can crack the ceramic element.

3. Bonding, resin molding and coating

In case of bonding, molding or coating this product, verify that these processes do not affect the quality of the capacitor by testing the performance of the bonded, molded or coated product in the intended equipment.

In case the amount of application, dryness/ hardening conditions of adhesives and molding resins

∆Caution (Handling)

Vibration and impact Do not expose a capacitor or its leads to excessive shock or vibration during use.

FAILURE TO FOLLOW THE ABOVE CAUTIONS MAY RESULT, WORST CASE, IN A SHORT CIRCUIT AND CAUSE FUMING OR PARTIAL DISPERSION WHEN THE PRODUCT IS USED. containing organic solvents (ethyl acetate, methyl ethyl ketone, toluene, etc.) are unsuitable, the outer coating resin of a capacitor may be damaged by the organic solvents and may result, worst case, in a short circuit.

The variation in thickness of adhesive or molding resin or coating may cause an outer coating resin cracking and/or ceramic element cracking of a capacitor in a temperature cycling.

4. Treatment after bonding, resin molding and coating When the outer coating is hot (over 100 degrees centigrade) after soldering, it becomes soft and fragile, so please be careful not to give it mechanical stress.

FAILURE TO FOLLOW THE ABOVE CAUTIONS MAY RESULT, WORST CASE, IN A SHORT CIRCUIT AND CAUSE FUMING OR PARTIAL DISPERSION WHEN THE PRODUCT IS USED.

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Notice

Notice (Rating)

Capacitance change of capacitor

In case of high dielectric constant type capacitors Capacitors have an aging characteristic, whereby the capacitor continually decreases its capacitance slightly if the capacitor is left on for a long time. Moreover, capacitance might change greatly depending on the surrounding temperature or an applied voltage.

Notice (Soldering and Mounting)

1. Cleaning (ultrasonic cleaning)

To perform ultrasonic cleaning, observe the following conditions.

Rinse bath capacity: Output of 20 watts per liter or less.

Rinsing time: 5 min. maximum.

Do not vibrate the PCB/PWB directly.

Excessive ultrasonic cleaning may lead to fatigue

destruction of the lead wires.

2. Soldering and Mounting

Insertion of the Lead Wire

• When soldering, insert the lead wire into the PCB without mechanically stressing the lead wire.

• Insert the lead wire into the PCB with a distance appropriate to the lead space.

Global Locations

For details please visit www.murata.com



1 Export Control

For customers outside Japan:

No Murata products should be used or sold, through any channels, for use in the design, development, production, utilization, maintenance or operation of, or otherwise contribution to (1) any weapons (Weapons of Mass Destruction [nuclear, chemical or biological weapons or missiles] or conventional weapons) or (2) goods or systems specially designed or intended for military end-use or utilization by military end-users.

For customers in Japan:

For products which are controlled items subject to the "Foreign Exchange and Foreign Trade Law" of Japan, the export license specified by the law is required for export. Please contact our sales representatives or product engineers before using the products in this catalog for the applications listed below, which require especially high reliability for the prevention of defects which might directly damage a third party's life, body or property, or when one of our products is intended for use in applications other than those specified in this catalog.

- (1) Aircraft equipment
- Aerospace equipment
- ③ Undersea equipment
- ④ Power plant equipment
- 5 Medical equipment
- Transportation equipment (vehicles, trains, ships, etc.)
- Traffic signal equipment
- B Disaster prevention / crime prevention equipment
- Data-processing equipment
- Application of similar complexity and/or reliability requirements to the applications listed above

Product specifications in this catalog are as of October 2019. They are subject to change or our products in it may be discontinued without advance notice. Please check with our sales representatives or product engineers before ordering. If there are any questions, please contact our sales representatives or product engineers.

Please read rating and CAUTION (for storage, operating, rating, soldering, mounting and handling) in this catalog to prevent smoking and/or burning, etc.

- This catalog has only typical specifications. Therefore, please approve our product specifications or transact the approval sheet for product specifications before ordering.
- Please note that unless otherwise specified, we shall assume no responsibility whatsoever for any conflict or dispute that may occur in connection with the effect of our and/or a third party's intellectual property rights and other related rights in consideration of your use of our products and/or information described or contained in our catalogs. In this connection, no representation shall be made to the effect that any third parties are authorized to use the rights mentioned above under licenses without our consent.
- 7 No ozone depleting substances (ODS) under the Montreal Protocol are used in our manufacturing process.

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RDER72H152K2K1C11B RDER72H222K2K1C11B RDER72H332K2K1C11B RDER72H472K2K1C11B
RDER72H682K2K1C11B RDER72D153K2K1C11B RDER72H153K2K1C11B RDER72D474K5B1C13B
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