

R75, Single Metallized Polypropylene Film, Radial, DC and Pulse Applications (Automotive Grade)

Overview

The R75 series is constructed of metallized polypropylene film with radial leads of tinned wire. The radial leads are electrically welded to the metal layer on the ends of the capacitor winding. The capacitor is encapsulated in a self-extinguishing solvent resistant plastic case with thermosetting resin material meeting the UL 94 V-0 requirements. Different winding constructions are used depending on voltage parameters and lead spacing. Please see the Performance Characteristics for more information.

Automotive grade devices (lead spacing 7.5 – 22.5 mm) meet the demanding Automotive Electronics Council's AEC-Q200 qualification requirements.

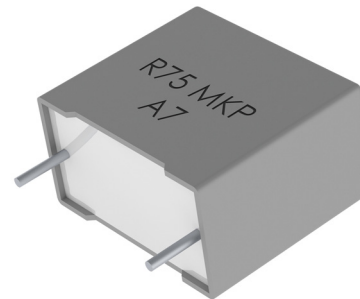
Applications

Typical applications include resonant circuit, high frequency medium to high current, silicon-controlled rectifier (SCR and IGBT) and SiC (e.g. MOSFET) commutation circuits as well as applications with high voltage and medium to high current and DC link, timing, oscillator circuits, high frequency coupling and decoupling applications.

Not suitable for across-the-line application (see Suppressor Capacitors).

Benefits

- Voltage range: 160 – 2,000 VDC
- Capacitance range: 220 pF – 33 μ F
- Lead Spacing: 5 – 37.5 mm
- Capacitance tolerance: \pm 5%, \pm 10%, \pm 20%
- Climatic category: 55/105/56 IEC 60068-1
- Operating temperature range of -55°C to $+105^{\circ}\text{C}$
- RoHS compliance and lead-free terminations
- Tape & Reel packaging in accordance with IEC 60286-2
- Self-healing
- Automotive (AEC-Q200) grade from lead spacing 7.5 – 22.5 mm



Part Number System

R75	P	N	2820	AA	30	K	
Series	Rated Voltage (VDC)	Lead Spacing (mm)	Capacitance Code (pF)	Packaging	Internal Use		Capacitance Tolerance
Metallized Polypropylene	G = 160 I = 250 M = 400 P = 630 Q = 1,000 R = 1,250 J = 1,300 T = 1,600 U = 2,000	C = 5 D = 7.5 F = 10 I = 15 N = 22.5 R = 27.5 W = 37.5	The last three digits represent significant figures. The first digit specifies the total number of zeros to be added.	See Ordering Options Table	00 10 20 30 40 45	50 60 70 80 L0	H = \pm 2.5% J = \pm 5% K = \pm 10% M = \pm 20%

Halogen free is available upon special request.

Built Into Tomorrow

Ordering Options Table

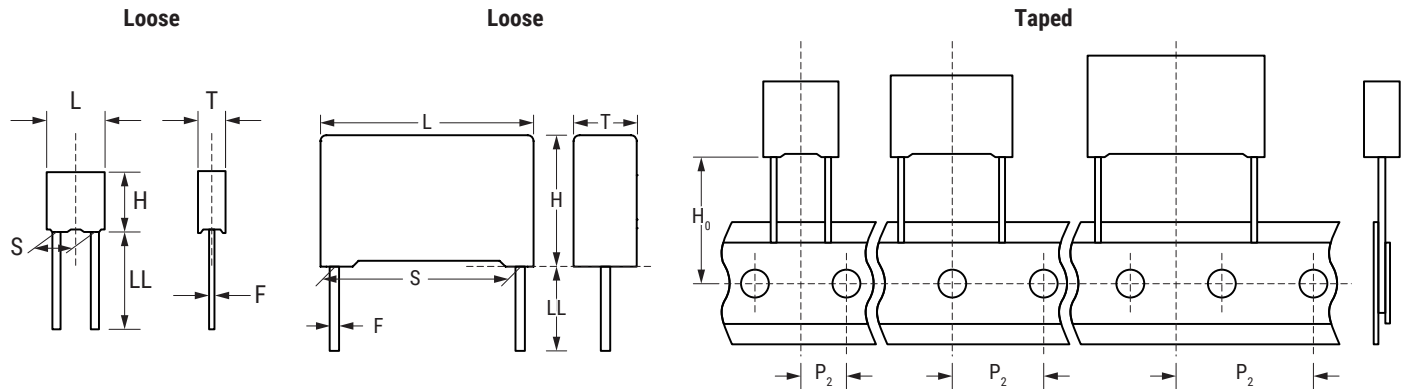
Lead Spacing Nominal (mm)	Type of Leads and Packaging	Lead Length (mm)	Lead and Packaging Code
5	Standard Lead and Packaging Options		
	Bulk (Bag) – Short Leads	4 +1.5/-0	AA
	Ammo Pack	H ₀ = 18.5±0.5	DQ
	Other Lead and Packaging Options		
	Tape & Reel (Standard Reel Ø 355 mm)	H ₀ = 18.5±0.5	CK
	Bulk – Short Leads	10±1	JC
	Bulk – Short Leads	4.0 +0.5/-0	JE
	Bulk – Short Leads	3.2 +0.3/-0.2	JH
Bulk – Long Leads	17 +1/-2	Z3	
7.5	Standard Lead and Packaging Options		
	Bulk – Short Leads	4 +2/-0	AA
	Ammo Pack	H ₀ = 18.5±0.5	DQ
	Other Lead and Packaging Options		
	Tape & Reel (Standard Reel Ø 355 mm)	H ₀ = 18.5±0.5	CK
	Bulk – Short Leads	2.7 +0.5/-0	JA
	Bulk – Short Leads	3.5 +0.5/-0	JB
	Bulk – Short Leads	4.0 +0.5/-0	JE
	Bulk – Short Leads	3.2 +0.3/-0.2	JH
	Bulk – Long Leads	18±1	JM
Bulk – Long Leads	17 +1/-2	Z3	
10 15 22.5	Standard Lead and Packaging Options		
	Bulk (Bag) – Short Leads	4 +2/-0	AA
	Ammo Pack	H ₀ = 18.5±0.5	DQ
	Other Lead and Packaging Options		
	Tape & Reel (Standard Reel Ø 355 mm)	H ₀ = 18.5±0.5	GY
	Tape & Reel (Large Reel Ø 500 mm)	H ₀ = 18.5±0.5	CK
	Bulk (Bag) – Short Leads	2.7 +0.5/-0	JA
	Bulk (Bag) – Short Leads	3.5 +0.5/-0	JB
	Bulk (Bag) – Short Leads	10±1	JC
	Bulk (Bag) – Short Leads	4.0 +0.5/-0	JE
	Bulk (Bag) – Short Leads	3.2 +0.3/-0.2	JH
	Bulk (Bag) – Long Leads	18±1	JM
	Bulk (Bag) – Long Leads	30 +5/-0	40
	Bulk (Bag) – Long Leads	25 +2/-1	50

Ordering Options Table cont.

Lead Spacing Nominal (mm)	Type of Leads and Packaging	Lead Length (mm)	Lead and Packaging Code
27.5	Standard Lead and Packaging Options		
	Bulk (Tray) – Short Leads	4 +2/-0	AA
	Other Lead and Packaging Options		
	Tape & Reel (Standard Reel Ø 355 mm)	$H_0 = 18.5 \pm 0.5$	GY
	Tape & Reel (Large Reel Ø 500 mm)	$H_0 = 18.5 \pm 0.5$	CK ¹
	Bulk (Tray) – Short Leads	3.5 +0.5/-0	JB
	Bulk (Tray) – Short Leads	4.0 +0.5/-0	JE
	Bulk (Tray) – Short Leads	3.2 +0.3/-0.2	JH
	Bulk (Tray) – Long Leads	30 +5/-0	40
Bulk (Tray) – Long Leads	25 +2/-1	50	
37.5	Standard Lead and Packaging Options		
	Bulk (Tray) – Short Leads	4 +2/-0	AA
	Other Lead and Packaging Options		
	Bulk (Tray) – Short Leads	3.5 +0.5/-0	JB
	Bulk (Tray) – Short Leads	4.0 +0.5/-0	JE
	Bulk (Tray) – Short Leads	3.2 +0.3/-0.2	JH
	Bulk (Tray) – Long Leads	30 +5/-0	40
	Bulk (Tray) – Long Leads	25 +2/-1	50

¹ = Not for all sizes, see "Packaging Quantities" table.

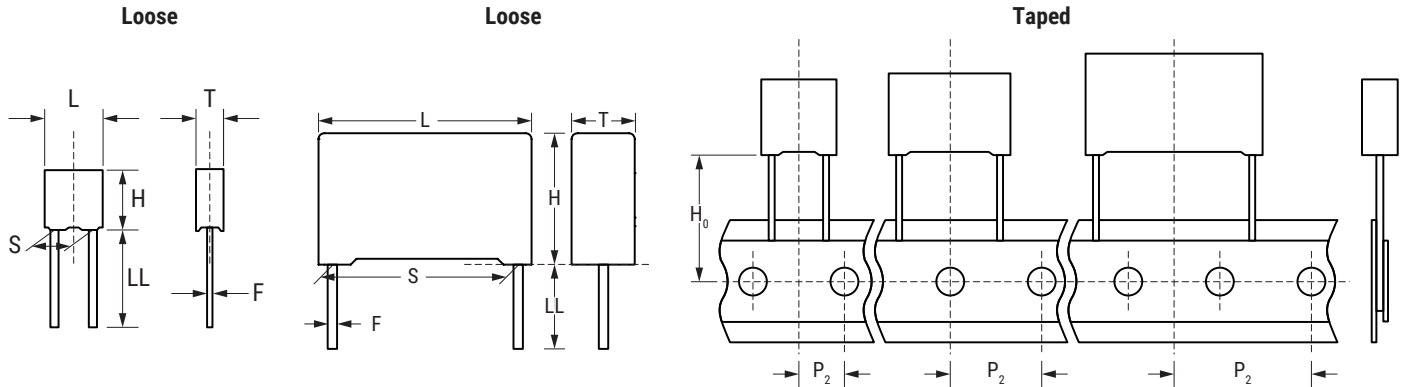
Dimensions – Millimeters



S		T		H		L		F	
Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
5.0	±0.4	3.5	+0.1/-0.5	7.5	+0.1/-0.5	7.2	+0.2/-0.5	0.5	±0.05
5.0	±0.4	4.5	+0.1/-0.5	9.5	+0.1/-0.5	7.2	+0.3/-0.5	0.5	±0.05
5.0	±0.4	5.0	+0.1/-0.5	10.0	+0.1/-0.5	7.2	+0.3/-0.5	0.5	±0.05
5.0	±0.4	6.0	+0.1/-0.5	11.0	+0.1/-0.5	7.2	+0.3/-0.5	0.5	±0.05
5.0	±0.4	7.2	+0.1/-0.5	13.0	+0.1/-0.5	7.2	+0.3/-0.5	0.5	±0.05
7.5	±0.4	3.0	+0.1/-0.5	8.0	+0.1/-0.5	10.0	+0.2/-0.5	0.5	±0.05
7.5	±0.4	4.0	+0.1/-0.5	9.0	+0.1/-0.5	10.0	+0.2/-0.5	0.5	±0.05
7.5	±0.4	5.0	+0.1/-0.5	10.5	+0.1/-0.5	10.0	+0.2/-0.5	0.5	±0.05
7.5	±0.4	6.0	+0.1/-0.5	12.0	+0.1/-0.5	10.5	+0.2/-0.5	0.5	±0.05
10.0	±0.4	4.0	+0.2/-0.5	9.0	+0.1/-0.5	13.0	+0.2/-0.5	0.6	±0.05
10.0	±0.4	5.0	+0.2/-0.5	11.0	+0.1/-0.5	13.0	+0.2/-0.5	0.6	±0.05
10.0	±0.4	6.0	+0.2/-0.5	12.0	+0.1/-0.5	13.0	+0.2/-0.5	0.6	±0.05
15.0	±0.4	4.0	+0.2/-0.5	10.0	+0.1/-0.5	18.0	+0.3/-0.5	0.8	±0.05
15.0	±0.4	5.0	+0.2/-0.5	11.0	+0.1/-0.5	18.0	+0.3/-0.5	0.8	±0.05
15.0	±0.4	6.0	+0.2/-0.5	12.0	+0.1/-0.5	18.0	+0.3/-0.5	0.8	±0.05
15.0	±0.4	7.5	+0.2/-0.5	13.5	+0.1/-0.5	18.0	+0.5/-0.5	0.8	±0.05
15.0	±0.4	8.5	+0.2/-0.5	14.5	+0.1/-0.5	18.0	+0.5/-0.5	0.8	±0.05
15.0	±0.4	9.0	+0.2/-0.5	12.5	+0.1/-0.5	18.0	+0.5/-0.5	0.8	±0.05
15.0	±0.4	10.0	+0.2/-0.5	16.0	+0.1/-0.5	18.0	+0.5/-0.5	0.8	±0.05
15.0	±0.4	11.0	+0.2/-0.5	19.0	+0.1/-0.5	18.0	+0.5/-0.5	0.8	±0.05
15.0	±0.4	13.0	+0.1/-0.5	12.0	+0.1/-0.5	18.0	+0.5/-0.5	0.8	±0.05

Note: See Ordering Options Table for lead length (LL/Ho) options.

Dimensions – Millimeters cont.



S		T		H		L		F	
Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance	Nominal	Tolerance
22.5	±0.4	6.0	+0.2/-0.5	15.0	+0.1/-0.5	26.5	+0.3/-0.5	0.8	±0.05
22.5	±0.4	7.0	+0.2/-0.5	16.0	+0.1/-0.5	26.5	+0.3/-0.5	0.8	±0.05
22.5	±0.4	8.5	+0.2/-0.5	17.0	+0.1/-0.5	26.5	+0.3/-0.5	0.8	±0.05
22.5	±0.4	10.0	+0.2/-0.5	18.5	+0.1/-0.5	26.5	+0.3/-0.5	0.8	±0.05
22.5	±0.4	11.0	+0.2/-0.5	20.0	+0.1/-0.5	26.5	+0.3/-0.5	0.8	±0.05
22.5	±0.4	13.0	+0.2/-0.5	22.0	+0.1/-0.5	26.5	+0.3/-0.5	0.8	±0.05
22.5	±0.4	14.5	+0.2/-0.5	29.5	+0.1/-0.5	26.5	+0.3/-0.5	0.8	±0.05
27.5	±0.4	9.0	+0.2/-0.7	17.0	+0.1/-0.7	32.0	+0.3/-0.7	0.8	±0.05
27.5	±0.4	11.0	+0.2/-0.7	20.0	+0.1/-0.7	32.0	+0.3/-0.7	0.8	±0.05
27.5	±0.4	13.0	+0.2/-0.7	22.0	+0.1/-0.7	32.0	+0.3/-0.7	0.8	±0.05
27.5	±0.4	13.0	+0.2/-0.7	25.0	+0.1/-0.7	32.0	+0.3/-0.7	0.8	±0.05
27.5	±0.4	14.0	+0.2/-0.7	28.0	+0.1/-0.7	32.0	+0.3/-0.7	0.8	±0.05
27.5	±0.4	18.0	+0.2/-0.7	33.0	+0.1/-0.7	32.0	+0.3/-0.7	0.8	±0.05
27.5	±0.4	21.0	+0.2/-0.7	12.5	+0.1/-0.7	32.0	+0.3/-0.7	0.8	±0.05
27.5	±0.4	22.0	+0.2/-0.7	37.0	+0.1/-0.7	32.0	+0.3/-0.7	0.8	±0.05
27.5	±0.4	24.0	+0.2/-0.7	15.0	+0.1/-0.7	32.0	+0.3/-0.7	0.8	±0.05
37.5	±0.4	11.0	+0.3/-0.7	22.0	+0.1/-0.7	41.5	+0.3/-0.7	1.0	±0.05
37.5	±0.4	13.0	+0.3/-0.7	24.0	+0.1/-0.7	41.5	+0.3/-0.7	1.0	±0.05
37.5	±0.4	16.0	+0.3/-0.7	28.5	+0.1/-0.7	41.5	+0.3/-0.7	1.0	±0.05
37.5	±0.4	19.0	+0.3/-0.7	32.0	+0.1/-0.7	41.5	+0.3/-0.7	1.0	±0.05
37.5	±0.4	20.0	+0.3/-0.7	40.0	+0.1/-0.7	41.5	+0.3/-0.7	1.0	±0.05
37.5	±0.4	24.0	+0.3/-0.7	44.0	+0.1/-0.7	41.5	+0.3/-0.7	1.0	±0.05
37.5	±0.4	24.0	+0.3/-0.7	15.0	+0.1/-0.7	41.5	+0.3/-0.7	1.0	±0.05
37.5	±0.4	24.0	+0.3/-0.7	19.0	+0.1/-0.7	41.5	+0.3/-0.7	1.0	±0.05
37.5	±0.4	30.0	+0.3/-0.7	45.0	+0.1/-0.7	41.5	+0.3/-0.7	1.0	±0.05

Note: See Ordering Options Table for lead length (LL/Ho) options.

Performance Characteristics

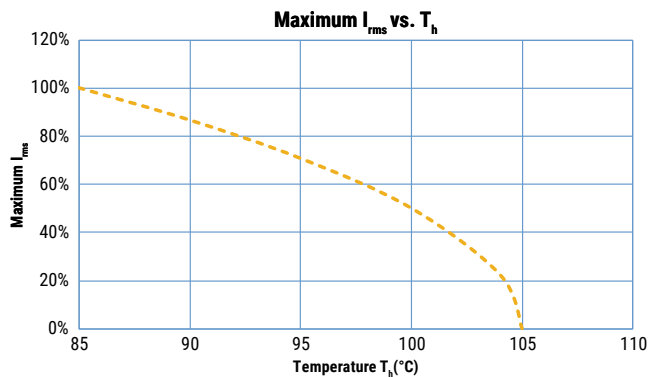
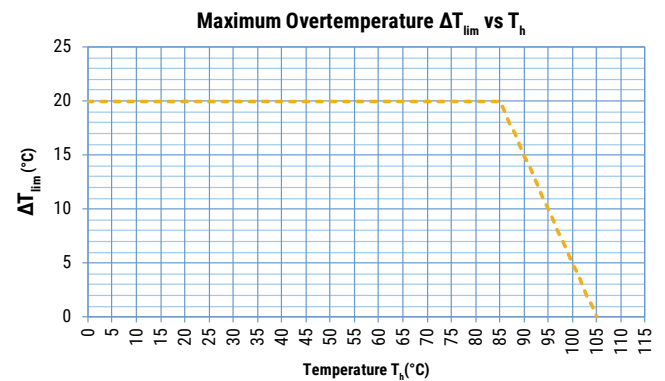
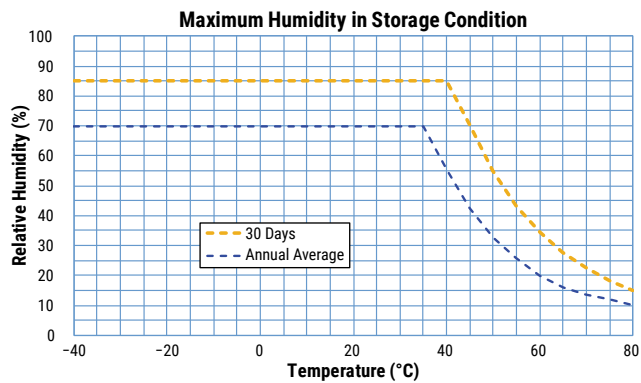
Dielectric	Polypropylene film													
Plates	Metal layer deposited by evaporation under vacuum													
Winding	Non-inductive type													
Leads	Tinned wire													
Protection	Plastic case, thermosetting resin filled. Box material is solvent resistant and flame retardant according to UL94.													
Related Documents	IEC 60384-16													
Sections	1									2	3			
Rated Voltage V_R (VDC)	160	160	250	250	400	400	630	630	1,000	1,300	1,000	1,250	1,600	2,000
Rated Voltage V_R (VAC)	70	90	140	160	200	220	220	250	300	400	400	450/600	650	700
Capacitance Range (μ F)	0.039 -0.33	0.068 -33	0.068 -0.22	0.012 -33	0.0039 -0.068	0.01 -15	0.001 -0.027	0.001 -8.2	0.0056 -3.9	0.0068 -3.3	0.00022 -0.0082	0.0082 -2.2	0.0039 -1.5	0.001 -1
Capacitance Values	E12 series (IEC 60063) measured at 1 kHz and +20 \pm 1°C													
Capacitance Tolerance	\pm 2.5%, \pm 5%, \pm 10%, \pm 20%													
Operating Temperature Range	-55°C to +105°C													
Rated Temperature T_R	+85°C													
Voltage Derating	Above +85°C DC voltage derating is 2%/°C (1.25%/°C for lead spacing 5 mm) and AC voltage derating is 1.25%/°C													
Climatic Category	55/105/56 IEC 60068-1													
Storage Conditions	Storage time: \leq 24 months from the date marked on the label package													
	Average relative humidity per year \leq 70%													
	RH \leq 85% for 30 days randomly distributed throughout the year													
	Dew is absent													
	Temperature: -40 to 80°C (see "Maximum Humidity in Storage Conditions" graph above)													
Test Voltage	1.6 x V_R VDC for 2 seconds (between terminations) at +25°C \pm 5°C													
Capacitance Drift	Maximum 0.5% after a 2 year storage period at a temperature of +10°C to +40°C and a relative humidity of 40% to 60%													
Maximum Pulse Steepness	dV/dt according to Table 1. For working voltages lower than rated voltage ($V < V_R$), the specified dV/dt can be multiplied by the factor V_R/V .													
Reliability (Reference IEC 61709)	Operational life > 200,000 hours at 85°C Failure rate \leq 1 FIT, T = +40°C, V = 0.5 x V_R Failure criteria: open or short circuit, capacitance change > 10%, DF 2 times the catalog limits, IR < 0.005 x initial limit													
Temperature Coefficient	-(200 \pm 100) ppm/°C at 1 kHz													
Self Inductance (Lead Length ~ 2 mm)	Lead Spacing (mm)	5	7.5	10	15	22.5	27.5	37.5						
	L (nH) \approx	7	8	9	10	16	18	20						
	Maximum 1 nH per 1 mm lead and capacitor length.													

Performance Characteristics cont.

Dissipation Factor $\tan\delta$	Maximum Values at 25°C ±5°C						
	Frequency	C ≤ 0.1 μF	C ≤ 0.1 μF (lead spacing 5 mm)	C > 0.1 μF (lead spacing 5 mm)	0.1 μF < C ≤ 1.0 μF	1.0 μF < C ≤ 4.7 μF	C > 4.7 μF
	1 kHz	0.04%	0.06%	0.06%	0.05%	0.06%	0.10%
10 kHz	0.06%	0.10%	0.10%	0.08%	-	-	
100 kHz	0.25%	0.30%	-	-	-	-	

Insulation Resistance	Measured at +25°C ±5°C, 100 VDC 60 seconds	
	Minimum Values Between Terminals	
	C ≤ 0.33 μF	C > 0.33 μF
	≥ 100,000 MΩ (≥ 500,000 MΩ)*	≥ 30,000 MΩ • μF (≥ 150,000 MΩ • μF)*

* Typical value

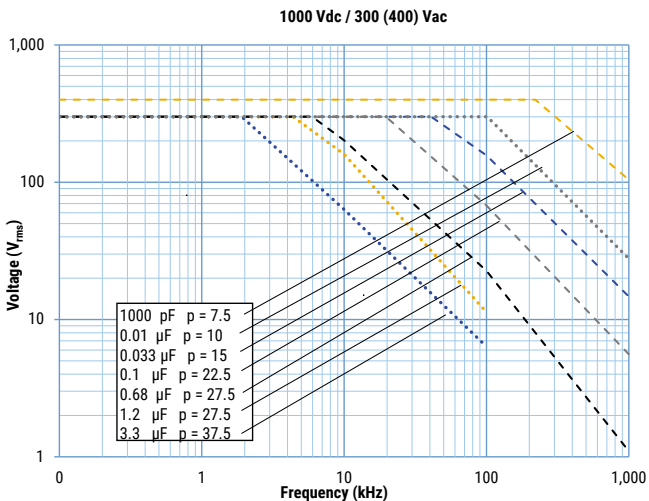
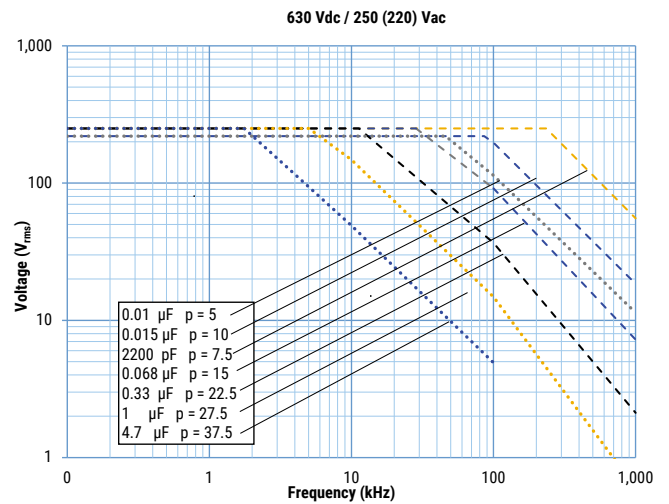
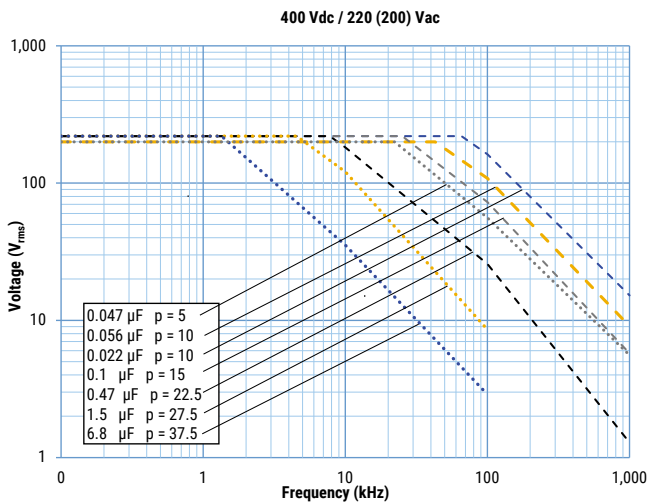
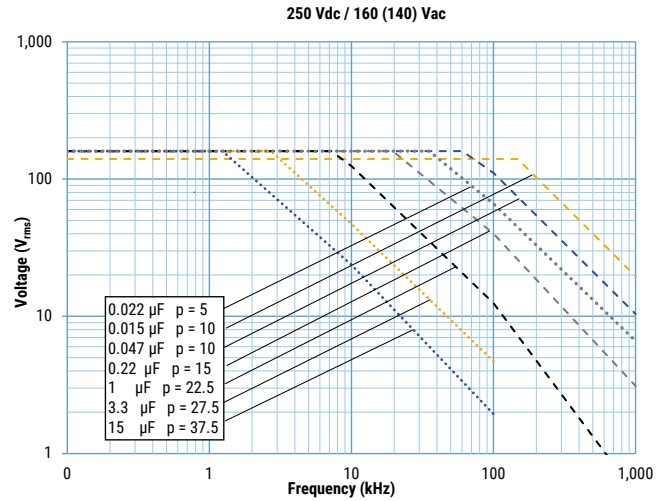
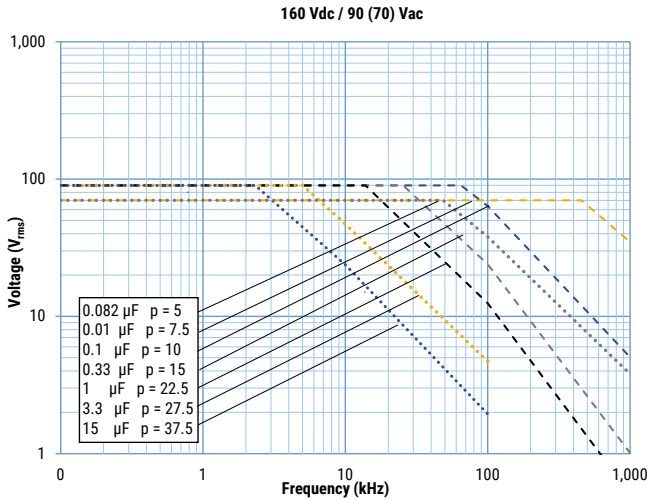


T_h is the maximum ambient temperature surrounding the capacitor or hottest contact point (e.g. tracks), whichever is higher, in the worst operation conditions in °C.

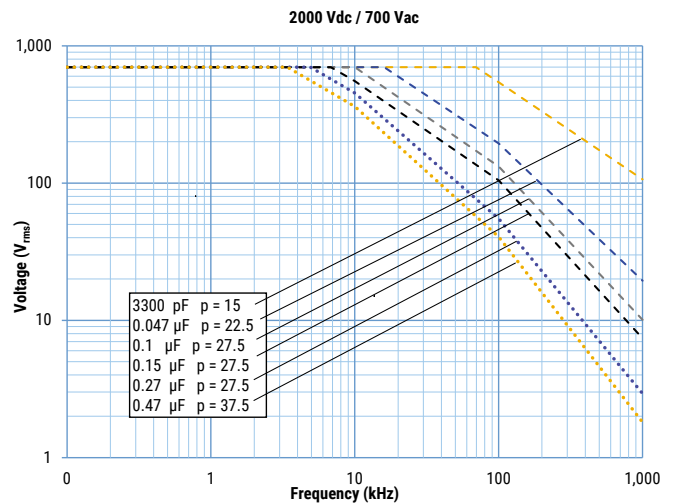
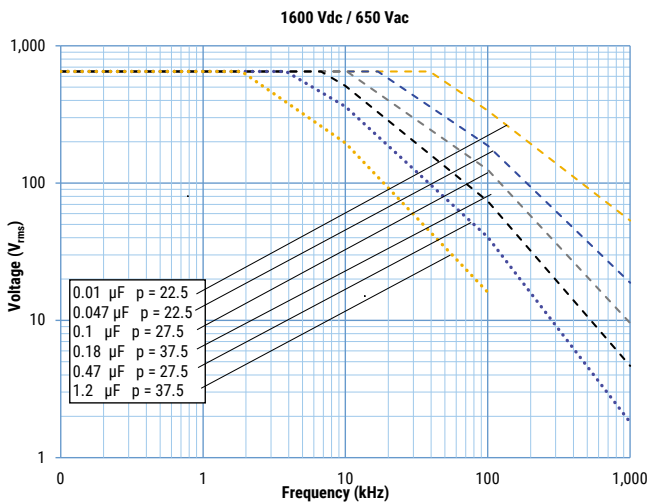
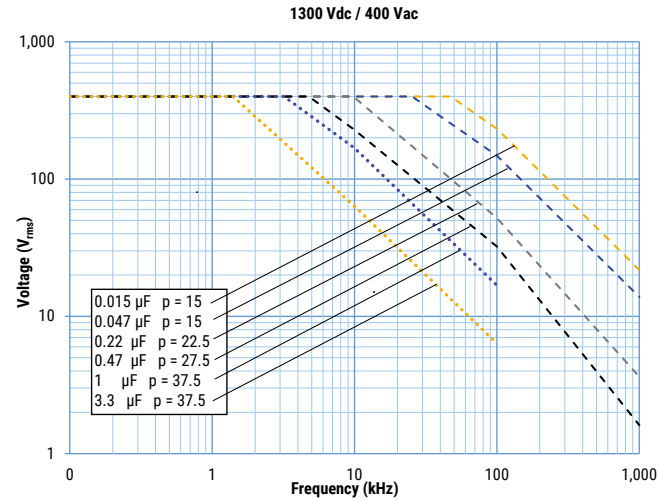
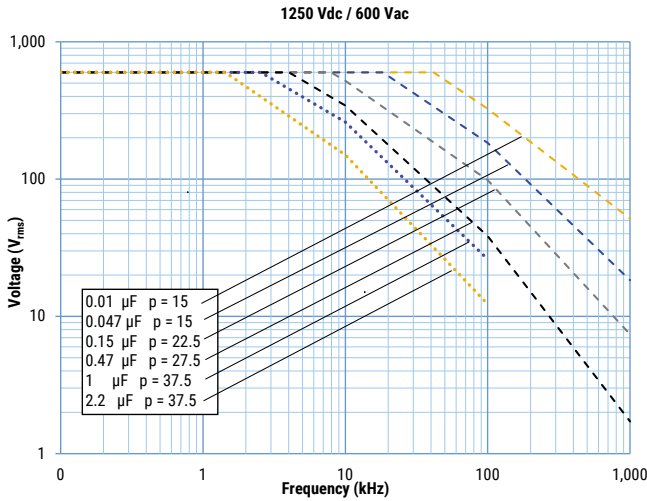
Qualification

Automotive Grade products meet or exceed the requirements outlined by the Automotive Electronics Council. Details regarding test methods and conditions are referenced in document AEC-Q200, Stress Test Qualification for Passive Components. For additional information regarding the Automotive Electronics Council and AEC-Q200, please visit their website at www.aecouncil.com.

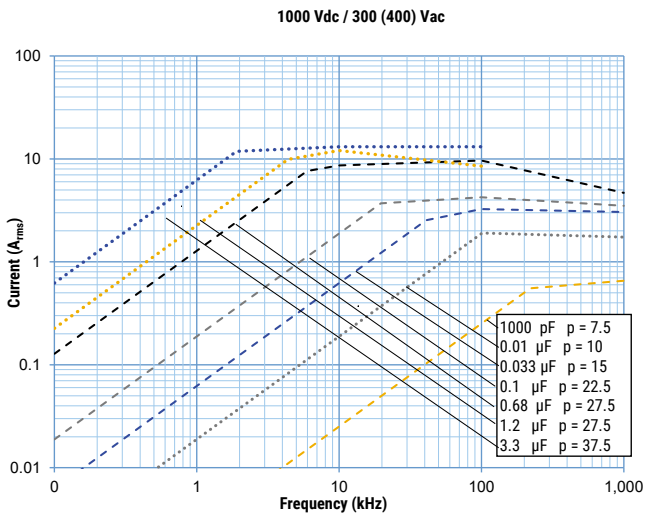
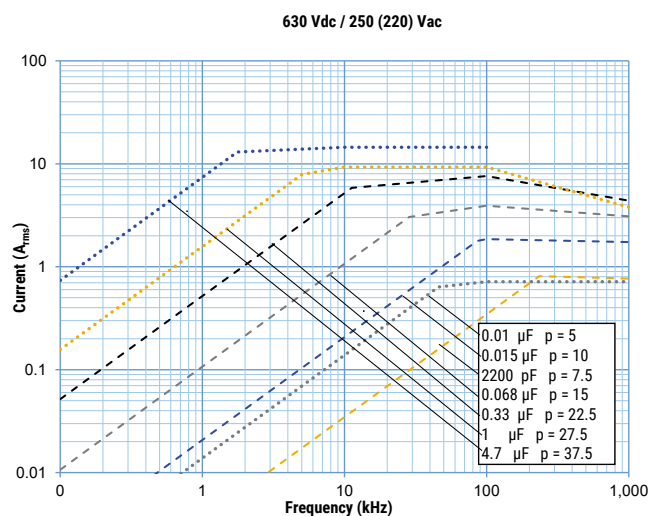
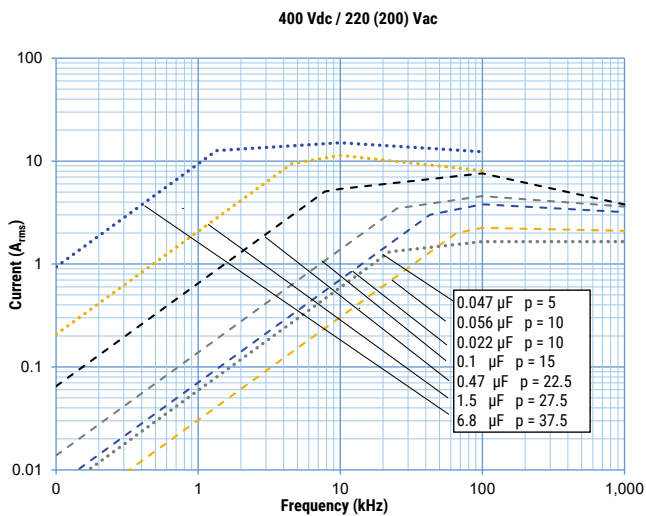
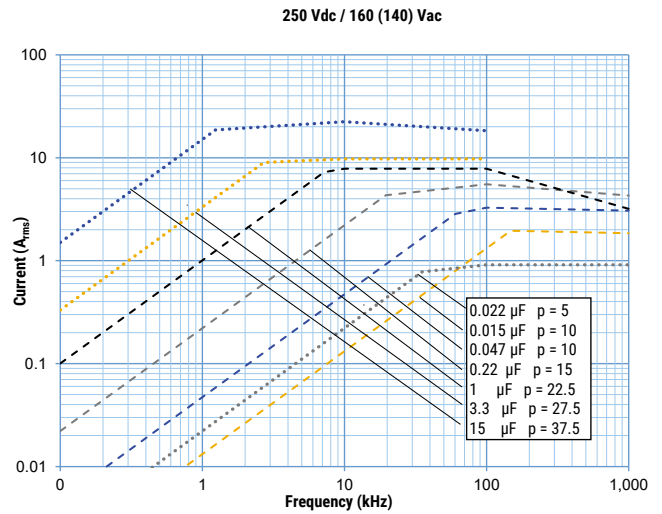
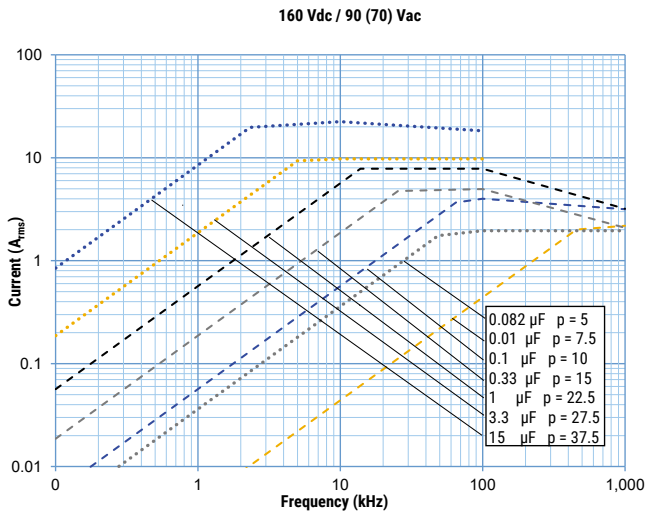
Maximum Voltage (V_{rms}) vs. Frequency (Sinusoidal Waveform/ $Th \leq 85^\circ C$)



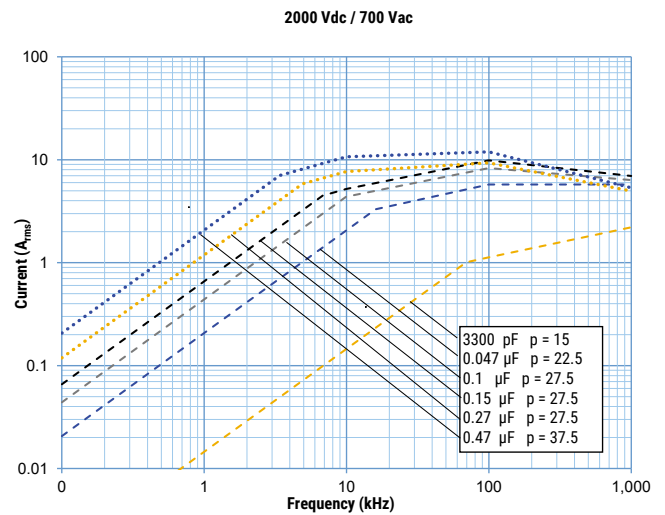
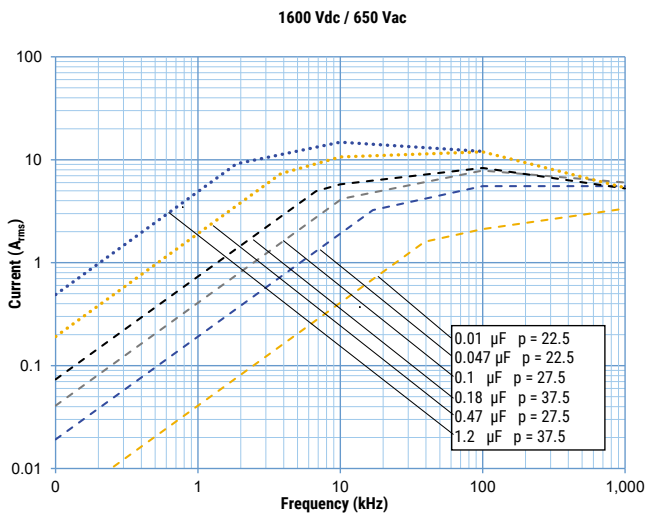
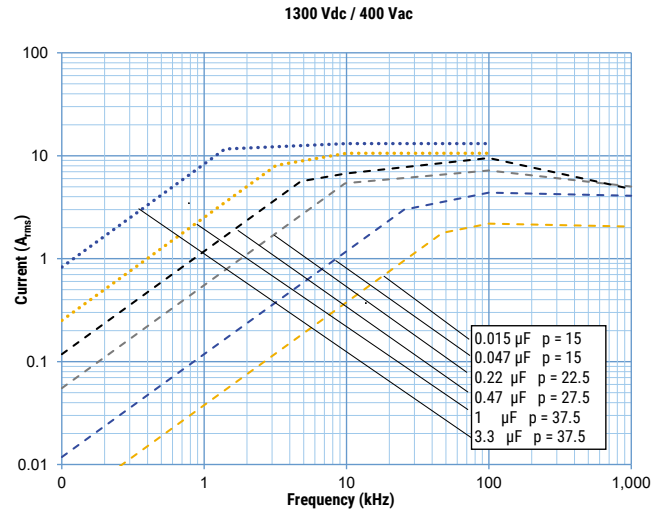
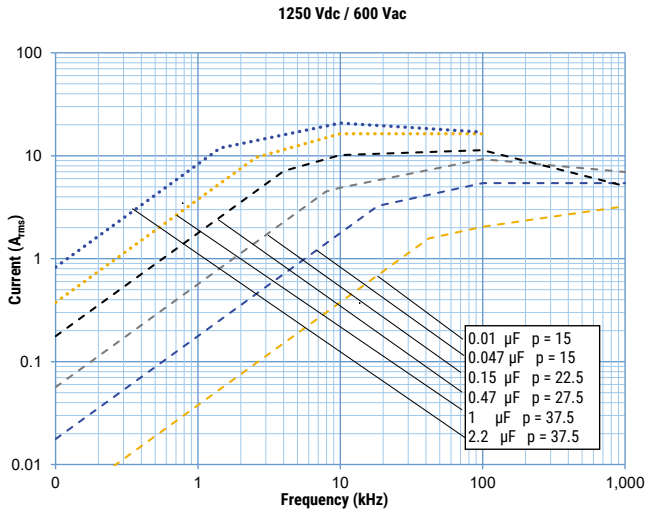
Maximum Voltage (V_{rms}) vs. Frequency (Sinusoidal Waveform/ $Th \leq 85^\circ C$) cont.



Maximum Current (I_{rms}) vs. Frequency (Sinusoidal Waveform/ $T_h \leq 85^\circ\text{C}$)



Maximum Current (I_{rms}) vs. Frequency (Sinusoidal Waveform/ $T_h \leq 85^\circ\text{C}$) cont.



Environmental Test Data

Damp Heat, Steady State Test	Test Conditions:		Performances
	Temperature: Relative humidity (RH): Test duration:	+40°C ±2°C 93% ±2% 56 days	Δ C/C ≤ 2%, Δ C/C ≤ 3% (lead spacing 5 mm), Δ tanδ ≤ 0.001 at 1 kHz IR after test ≥ 50% of initial limit
Endurance Test	Test Conditions		Performances
	Temperature: Voltage applied: Test duration:	+85°C ±2°C 1.25 x V _R (DC) 2,000 hours 1,000 hours (lead spacing 5 mm)	Δ C/C ≤ 3%, Δ tanδ ≤ 0.001 at 10 kHz for C ≤ 1 μF Δ tanδ ≤ 0.001 at 1 kHz for C > 1 μF IR after test ≥ 50% of initial limit
Resistance to Soldering Heat Test	Test Conditions		Performances
	Solder bath temperature: Dipping time (with heat screen):	260°C ±5°C 10 seconds ±1 second	Δ C/C ≤ 1%, Δ C/C ≤ 2% (lead spacing 5 mm), Δ tanδ ≤ 0.001 at 10 kHz for C ≤ 1 μF Δ tanδ ≤ 0.001 at 1 kHz for C > 1 μF IR after test ≥ initial limit

Environmental Compliance

All KEMET pulse capacitors are RoHS Compliant.



Table 1 – Ratings & Part Number Reference

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (S)	dV/dt (V/µs)	Max K ₀ (V ² /µs)	I _{pk}	ESL	ESR max	I _{rms} max (*)	R _{th}	KEMET Internal Part Number	Customer Part Number
										Lead Length 2x 4 mm	at 100 kHz	at 100 kHz, 85°C			
			A _{pk}	nH	mΩ					A _{rms}	(°C/W)				
160	70	0.039	3.5	7.5	7.2	5.0	100	32,000	4	7	122.4	1.21	111	75GC2390(1)40(4)	R75GC2390(1)40(4)
160	70	0.047	4.5	9.5	7.2	5.0	100	32,000	5	7	101.6	1.44	94	75GC2470(1)40(4)	R75GC2470(1)40(4)
160	70	0.056	4.5	9.5	7.2	5.0	100	32,000	6	7	85.3	1.58	94	75GC2560(1)40(4)	R75GC2560(1)40(4)
160	70	0.068	4.5	9.5	7.2	5.0	100	32,000	7	7	70.2	1.74	94	75GC2680(1)40(4)	R75GC2680(1)40(4)
160	70	0.082	5.0	10.0	7.2	5.0	100	32,000	8	7	58.2	1.96	90	75GC2820(1)40(4)	R75GC2820(1)40(4)
160	70	0.1	5.0	10.0	7.2	5.0	100	32,000	10	7	47.7	2.16	90	75GC3100(1)40(4)	R75GC3100(1)40(4)
160	70	0.12	6.0	11.0	7.2	5.0	100	32,000	12	7	39.8	2.48	82	75GC3120(1)40(4)	R75GC3120(1)40(4)
160	70	0.15	6.0	11.0	7.2	5.0	100	32,000	15	7	31.8	2.77	82	75GC3150(1)40(4)	R75GC3150(1)40(4)
160	70	0.18	7.2	13.0	7.2	5.0	100	32,000	18	7	44.2	2.50	73	75GC3180(1)40(4)	R75GC3180(1)40(4)
160	70	0.22	7.2	13.0	7.2	5.0	100	32,000	22	7	36.2	2.76	73	75GC3220(1)40(4)	R75GC3220(1)40(4)
160	70	0.1	4.0	9.0	10.0	7.5	100	32,000	10	8	11.1	4.40	88	75GD3100(1)B0(2)	R75GD3100(1)B0(2)
160	70	0.12	5.0	10.5	10.0	7.5	100	32,000	12	8	9.3	5.25	78	75GD3120(1)B0(2)	R75GD3120(1)B0(2)
160	70	0.15	5.0	10.5	10.0	7.5	100	32,000	15	8	7.4	5.87	78	75GD3150(1)B0(2)	R75GD3150(1)B0(2)
160	70	0.18	6.0	12.0	10.5	7.5	100	32,000	18	8	10.6	5.21	69	75GD3180(1)A0(2)	R75GD3180(1)A0(2)
160	70	0.22	6.0	12.0	10.5	7.5	100	32,000	22	8	8.7	5.76	69	75GD3220(1)A0(2)	R75GD3220(1)A0(2)
160	70	0.12	4.0	9.0	13.0	10.0	90	28,800	11	9	13.3	4.38	79	75GF3120(1)A0(2)	R75GF3120(1)A0(2)
160	70	0.15	4.0	9.0	13.0	10.0	90	28,800	14	9	10.6	4.90	79	75GF3150(1)A0(2)	R75GF3150(1)A0(2)
160	70	0.18	5.0	11.0	13.0	10.0	90	28,800	16	9	13.3	4.67	69	75GF3180(1)A0(2)	R75GF3180(1)A0(2)
160	70	0.22	5.0	11.0	13.0	10.0	90	28,800	20	9	10.9	5.17	69	75GF3220(1)A0(2)	R75GF3220(1)A0(2)
160	70	0.27	6.0	12.0	13.0	10.0	90	28,800	24	9	17.7	4.21	64	75GF3270(1)A0(2)	R75GF3270(1)A0(2)
160	70	0.33	6.0	12.0	13.0	10.0	90	28,800	30	9	14.5	4.65	64	75GF3330(1)A0(2)	R75GF3330(1)A0(2)
160	90	0.068	4.0	9.0	10.0	7.5	310	99,200	21	8	16.4	3.73	88	75GD2680(1)40(2)	R75GD2680(1)40(2)
160	90	0.082	4.0	9.0	10.0	7.5	310	99,200	25	8	13.6	4.10	88	75GD2820(1)40(2)	R75GD2820(1)40(2)
160	90	0.1	5.0	10.5	10.0	7.5	310	99,200	31	8	11.1	4.80	78	75GD3100(1)40(2)	R75GD3100(1)40(2)
160	90	0.12	5.0	10.5	10.0	7.5	310	99,200	37	8	9.3	5.25	78	75GD3120(1)40(2)	R75GD3120(1)40(2)
160	90	0.15	6.0	12.0	10.5	7.5	310	99,200	47	8	7.4	6.23	69	75GD3150(1)00(2)	R75GD3150(1)00(2)
160	90	0.18	6.0	12.0	10.5	7.5	310	99,200	56	8	10.6	5.21	69	75GD3180(1)30(2)	R75GD3180(1)30(2)
160	90	0.082	4.0	9.0	13.0	10.0	200	64,000	16	9	19.4	3.62	79	75GF2820(1)00(2)	R75GF2820(1)00(2)
160	90	0.1	4.0	9.0	13.0	10.0	200	64,000	20	9	15.9	4.00	79	75GF3100(1)30(2)	R75GF3100(1)30(2)
160	90	0.12	5.0	11.0	13.0	10.0	200	64,000	24	9	13.3	4.67	69	75GF3120(1)00(2)	R75GF3120(1)00(2)
160	90	0.15	5.0	11.0	13.0	10.0	200	64,000	30	9	10.6	5.22	69	75GF3150(1)00(2)	R75GF3150(1)00(2)
160	90	0.18	6.0	12.0	13.0	10.0	200	64,000	36	9	13.3	4.86	64	75GF3180(1)00(2)	R75GF3180(1)00(2)
160	90	0.22	6.0	12.0	13.0	10.0	200	64,000	44	9	10.9	5.37	64	75GF3220(1)30(2)	R75GF3220(1)30(2)
160	90	0.15	5.0	11.0	18.0	15.0	120	38,400	18	10	10.6	5.59	60	75GI3150(1)00(2)	R75GI3150(1)00(2)
160	90	0.18	5.0	11.0	18.0	15.0	120	38,400	22	10	13.3	5.00	60	75GI3180(1)00(2)	R75GI3180(1)00(2)
160	90	0.22	5.0	11.0	18.0	15.0	120	38,400	26	10	10.9	5.53	60	75GI3220(1)00(2)	R75GI3220(1)00(2)
160	90	0.27	6.0	12.0	18.0	15.0	120	38,400	32	10	17.7	4.50	56	75GI3270(1)00(2)	R75GI3270(1)00(2)
160	90	0.33	6.0	12.0	18.0	15.0	120	38,400	40	10	14.5	4.97	56	75GI3330(1)00(2)	R75GI3330(1)00(2)
160	90	0.39	7.5	13.5	18.0	15.0	120	38,400	47	10	12.2	5.68	51	75GI3390(1)00(2)	R75GI3390(1)00(2)
160	90	0.47	7.5	13.5	18.0	15.0	120	38,400	56	10	10.2	6.23	51	75GI3470(1)00(2)	R75GI3470(1)00(2)
160	90	0.47	9.0	12.5	18.0	15.0	120	38,400	56	10	10.2	6.30	50	75GI3470(1)60(2)	R75GI3470(1)60(2)
160	90	0.56	8.5	14.5	18.0	15.0	120	38,400	67	10	8.5	7.01	48	75GI3560(1)00(2)	R75GI3560(1)00(2)
160	90	0.56	9.0	12.5	18.0	15.0	120	38,400	67	10	8.5	6.88	50	75GI3560(1)60(2)	R75GI3560(1)60(2)
160	90	0.68	8.5	14.5	18.0	15.0	120	38,400	82	10	7.0	7.72	48	75GI3680(1)00(2)	R75GI3680(1)00(2)
160	90	0.68	13.0	12.0	18.0	15.0	120	38,400	82	10	7.0	7.96	45	75GI3680(1)60(2)	R75GI3680(1)60(2)
160	90	0.82	10.0	16.0	18.0	15.0	120	38,400	98	10	5.8	8.83	44	75GI3820(1)00(2)	R75GI3820(1)00(2)
160	90	1	10.0	16.0	18.0	15.0	120	38,400	120	10	4.8	9.75	44	75GI4100(1)00(2)	R75GI4100(1)00(2)
160	90	0.82	7.0	16.0	26.5	22.5	70	22,400	57	16	9.7	7.09	41	75GN3820(1)00(2)	R75GN3820(1)00(2)
160	90	1	7.0	16.0	26.5	22.5	70	22,400	70	16	8.0	7.83	41	75GN4100(1)00(2)	R75GN4100(1)00(2)
160	90	1.2	8.5	17.0	26.5	22.5	70	22,400	84	16	13.3	6.27	38	75GN4120(1)00(2)	R75GN4120(1)00(2)
VDC	VAC	Cap Value	T	H	L	Lead Spacing (S)	dV/dt (V/µs)	Max K ₀ (V ² /µs)	A _{pk}	Lead Length 2x 4 mm	at 100 kHz	A _{rms}	R _{th}	KEMET Internal Part Number	Customer Part Number
			Dimensions						I _{pk}	ESL	ESR max	I _{rms} max (*)			

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) J = 5%, K = 10%, M = 20%
(3) K = 10%, M = 20%
(4) H = 2.5%, J = 5%, K = 10%
(*) I_{rms} value that leads to a ΔT of ≈ 20°C on the box surface > T_{BOX} = T_{AMB} + ΔT = 85°C + 20°C = 105°C

Table 1 – Ratings & Part Number Reference cont.

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (S)	dV/dt (V/µs)	Max K ₀ (V ² /µs)	I _{pk}	ESL	ESR max	I _{rms} max (*)	R _{th}	KEMET Internal Part Number	Customer Part Number
										Lead Length 2x 4 mm	at 100 kHz	at 100 kHz, 85°C			
			A _{pk}	nH	mΩ					A _{rms}	(°C/W)				
160	90	1.5	10.0	18.5	26.5	22.5	70	22,400	105	16	10.6	7.26	36	75GN4150(1)00(2)	R75GN4150(1)00(2)
160	90	1.8	10.0	18.5	26.5	22.5	70	22,400	126	16	8.8	7.95	36	75GN4180(1)00(2)	R75GN4180(1)00(2)
160	90	1.5	9.0	17.0	32.0	27.5	60	19,200	90	18	10.6	7.34	35	75GR4150(1)00(2)	R75GR4150(1)00(2)
160	90	1.8	9.0	17.0	32.0	27.5	60	19,200	108	18	8.8	8.05	35	75GR4180(1)00(2)	R75GR4180(1)00(2)
160	90	2.2	11.0	20.0	32.0	27.5	60	19,200	132	18	7.2	9.38	31	75GR4220(1)30(2)	R75GR4220(1)30(2)
160	90	2.7	11.0	20.0	32.0	27.5	60	19,200	162	18	8.8	8.49	31	75GR4270(1)00(2)	R75GR4270(1)00(2)
160	90	3.3	13.0	22.0	32.0	27.5	60	19,200	198	18	7.2	9.75	29	75GR4330(1)00(2)	R75GR4330(1)00(2)
160	90	3.3	24.0	15.0	32.0	27.5	60	19,200	198	18	7.2	10.09	27	75GR4330(1)L0(2)	R75GR4330(1)L0(2)
160	90	3.9	13.0	22.0	32.0	27.5	60	19,200	234	18	6.1	10.60	29	75GR4390(1)00(2)	R75GR4390(1)00(2)
160	90	3.9	24.0	15.0	32.0	27.5	60	19,200	234	18	6.1	10.97	27	75GR4390(1)L0(2)	R75GR4390(1)L0(2)
160	90	4.7	13.0	25.0	32.0	27.5	60	19,200	282	18	5.1	11.91	28	75GR4470(1)30(2)	R75GR4470(1)30(2)
160	90	5.6	14.0	28.0	32.0	27.5	60	19,200	336	18	4.3	13.41	26	75GR4560(1)00(2)	R75GR4560(1)00(2)
160	90	6.8	18.0	33.0	32.0	27.5	60	19,200	408	18	7.0	11.14	23	75GR4680(1)00(2)	R75GR4680(1)00(2)
160	90	8.2	18.0	33.0	32.0	27.5	60	19,200	492	18	5.8	12.24	23	75GR4820(1)00(2)	R75GR4820(1)00(2)
160	90	10	22.0	37.0	32.0	27.5	60	19,200	600	18	4.8	14.20	21	75GR5100(1)00(2)	R75GR5100(1)00(2)
160	90	12	22.0	37.0	32.0	27.5	60	19,200	720	18	4.0	15.56	21	75GR5120(1)00(2)	R75GR5120(1)00(2)
160	90	3.3	11.0	22.0	41.5	37.5	35	11,200	116	20	7.2	10.10	27	75GW4330(1)00(2)	R75GW4330(1)00(2)
160	90	3.9	11.0	22.0	41.5	37.5	35	11,200	137	20	6.1	10.98	27	75GW4390(1)00(2)	R75GW4390(1)00(2)
160	90	4.7	11.0	22.0	41.5	37.5	35	11,200	165	20	5.1	12.05	27	75GW4470(1)00(2)	R75GW4470(1)00(2)
160	90	5.6	13.0	24.0	41.5	37.5	35	11,200	196	20	4.3	13.63	25	75GW4560(1)00(2)	R75GW4560(1)00(2)
160	90	6.8	16.0	28.5	41.5	37.5	35	11,200	238	20	7.0	11.24	23	75GW4680(1)00(2)	R75GW4680(1)00(2)
160	90	6.8	24.0	15.0	41.5	37.5	35	11,200	238	20	7.0	10.81	24	75GW4680(1)L0(2)	R75GW4680(1)L0(2)
160	90	8.2	16.0	28.5	41.5	37.5	35	11,200	287	20	5.8	12.34	23	75GW4820(1)00(2)	R75GW4820(1)00(2)
160	90	8.2	24.0	19.0	41.5	37.5	35	11,200	287	20	5.8	12.26	23	75GW4820(1)L0(2)	R75GW4820(1)L0(2)
160	90	10	14.0	32.0	41.5	37.5	35	11,200	350	20	4.8	14.23	21	75GW5100(1)00(2)	R75GW5100(1)00(2)
160	90	12	19.0	32.0	41.5	37.5	35	11,200	420	20	4.0	15.59	21	75GW5120(1)00(2)	R75GW5120(1)00(2)
160	90	15	20.0	40.0	41.5	37.5	35	11,200	525	20	3.2	18.30	19	75GW5150(1)00(2)	R75GW5150(1)00(2)
160	90	18	20.0	40.0	41.5	37.5	35	11,200	630	20	2.7	20.05	19	75GW5180(1)00(2)	R75GW5180(1)00(2)
160	90	22	24.0	44.0	41.5	37.5	35	11,200	770	20	2.2	23.13	17	75GW5220(1)00(2)	R75GW5220(1)00(2)
160	90	27	30.0	45.0	41.5	37.5	35	11,200	945	20	1.8	26.57	16	75GW5270(1)00(2)	R75GW5270(1)00(2)
160	90	33	30.0	45.0	41.5	37.5	35	11,200	1,155	20	1.4	29.37	16	75GW5330(1)00(2)	R75GW5330(1)00(2)
250	140	0.068	4.0	9.0	10.0	7.5	180	90,000	12	8	16.4	3.73	88	75ID2680(1)B0(2)	R75ID2680(1)B0(2)
250	140	0.082	4.0	9.0	10.0	7.5	180	90,000	15	8	13.6	4.10	88	75ID2820(1)B0(2)	R75ID2820(1)B0(2)
250	140	0.1	5.0	10.5	10.0	7.5	180	90,000	18	8	11.1	4.80	78	75ID3100(1)B0(2)	R75ID3100(1)B0(2)
250	140	0.12	5.0	10.5	10.0	7.5	180	90,000	22	8	9.3	5.25	78	75ID3120(1)B0(2)	R75ID3120(1)B0(2)
250	140	0.15	6.0	12.0	10.5	7.5	180	90,000	27	8	7.4	6.23	69	75ID3150(1)A0(2)	R75ID3150(1)A0(2)
250	140	0.18	6.0	12.0	10.5	7.5	180	90,000	32	8	10.6	5.21	69	75ID3180(1)A0(2)	R75ID3180(1)A0(2)
250	140	0.082	4.0	9.0	13.0	10.0	150	75,000	12	9	19.4	3.62	79	75IF2820(1)A0(2)	R75IF2820(1)A0(2)
250	140	0.1	4.0	9.0	13.0	10.0	150	75,000	15	9	15.9	4.00	79	75IF3100(1)A0(2)	R75IF3100(1)A0(2)
250	140	0.12	5.0	11.0	13.0	10.0	150	75,000	18	9	13.3	4.67	69	75IF3120(1)A0(2)	R75IF3120(1)A0(2)
250	140	0.15	5.0	11.0	13.0	10.0	150	75,000	23	9	10.6	5.22	69	75IF3150(1)A0(2)	R75IF3150(1)A0(2)
250	140	0.18	6.0	12.0	13.0	10.0	150	75,000	27	9	13.3	4.86	64	75IF3180(1)A0(2)	R75IF3180(1)A0(2)
250	140	0.22	6.0	12.0	13.0	10.0	150	75,000	33	9	10.9	5.37	64	75IF3220(1)A0(2)	R75IF3220(1)A0(2)
250	160	0.012	3.5	7.5	7.2	5.0	250	125,000	3	7	397.9	0.67	111	75IC2120(1)45(4)	R75IC2120(1)45(4)
250	160	0.015	3.5	7.5	7.2	5.0	250	125,000	4	7	318.3	0.75	111	75IC2150(1)45(4)	R75IC2150(1)45(4)
250	160	0.018	3.5	7.5	7.2	5.0	250	125,000	5	7	265.3	0.83	111	75IC2180(1)45(4)	R75IC2180(1)45(4)
250	160	0.022	3.5	7.5	7.2	5.0	250	125,000	6	7	217.0	0.91	111	75IC2220(1)45(4)	R75IC2220(1)45(4)
250	160	0.027	3.5	7.5	7.2	5.0	250	125,000	7	7	176.8	1.01	111	75IC2270(1)45(4)	R75IC2270(1)45(4)
250	160	0.033	3.5	7.5	7.2	5.0	250	125,000	8	7	144.7	1.12	111	75IC2330(1)45(4)	R75IC2330(1)45(4)
250	160	0.039	4.5	9.5	7.2	5.0	250	125,000	10	7	122.4	1.32	94	75IC2390(1)40(4)	R75IC2390(1)40(4)
VDC	VAC	Cap Value	T	H	L	Lead Spacing (S)	dV/dt (V/µs)	Max K ₀ (V ² /µs)	A _{pk}	ESL	ESR max	A _{rms}	R _{th}	KEMET Internal Part Number	Customer Part Number
									I _{pk}	nH	mΩ	I _{rms} max (*)			

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) J = 5%, K = 10%, M = 20%
(3) K = 10%, M = 20%
(4) H = 2.5%, J = 5%, K = 10%
(*) I_{rms} value that leads to a ΔT of ≈ 20°C on the box surface > T_{BOX} = T_{AMB} + ΔT = 85°C + 20°C = 105°C

Table 1 – Ratings & Part Number Reference cont.

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (S)	dV/dt (V/µs)	Max K_v (V ² /µs)	I_{pk}	ESL	ESR max	I_{rms} max (*)		R_{th}	KEMET Internal Part Number	Customer Part Number
												Lead Length 2x 4 mm	at 100 kHz			
			T	H	L					A_{pk}	nH			mΩ		
250	160	27	24.0	44.0	41.5	37.5	40	20,000	1,080	20	1.8	25.62	17	75IW5270(1)40(2)	R75IW5270(1)40(2)	
250	160	33	30.0	45.0	41.5	37.5	40	20,000	1,320	20	1.4	29.37	16	75IW5330(1)40(2)	R75IW5330(1)40(2)	
400	200	0.0039	3.5	7.5	7.2	5.0	400	320,000	2	7	1224.3	0.38	111	75MC1390(1)40(4)	R75MC1390(1)40(4)	
400	200	0.0047	3.5	7.5	7.2	5.0	400	320,000	2	7	1015.9	0.42	111	75MC1470(1)40(4)	R75MC1470(1)40(4)	
400	200	0.0056	3.5	7.5	7.2	5.0	400	320,000	2	7	852.6	0.46	111	75MC1560(1)40(4)	R75MC1560(1)40(4)	
400	200	0.0068	3.5	7.5	7.2	5.0	400	320,000	3	7	702.2	0.51	111	75MC1680(1)40(4)	R75MC1680(1)40(4)	
400	200	0.0082	3.5	7.5	7.2	5.0	400	320,000	3	7	582.3	0.56	111	75MC1820(1)40(4)	R75MC1820(1)40(4)	
400	200	0.01	3.5	7.5	7.2	5.0	400	320,000	4	7	477.5	0.62	111	75MC2100(1)40(4)	R75MC2100(1)40(4)	
400	200	0.012	4.5	9.5	7.2	5.0	400	320,000	5	7	397.9	0.73	94	75MC2120(1)40(4)	R75MC2120(1)40(4)	
400	200	0.015	4.5	9.5	7.2	5.0	400	320,000	6	7	318.3	0.82	94	75MC2150(1)40(4)	R75MC2150(1)40(4)	
400	200	0.018	5.0	10.0	7.2	5.0	400	320,000	7	7	265.3	0.92	90	75MC2180(1)40(4)	R75MC2180(1)40(4)	
400	200	0.022	5.0	10.0	7.2	5.0	400	320,000	9	7	217.0	1.01	90	75MC2220(1)40(4)	R75MC2220(1)40(4)	
400	200	0.027	6.0	11.0	7.2	5.0	400	320,000	11	7	176.8	1.17	82	75MC2270(1)40(4)	R75MC2270(1)40(4)	
400	200	0.033	6.0	11.0	7.2	5.0	400	320,000	13	7	144.7	1.30	82	75MC2330(1)40(4)	R75MC2330(1)40(4)	
400	200	0.039	7.2	13.0	7.2	5.0	400	320,000	16	7	122.4	1.50	73	75MC2390(1)40(4)	R75MC2390(1)40(4)	
400	200	0.047	7.2	13.0	7.2	5.0	400	320,000	19	7	101.6	1.65	73	75MC2470(1)40(4)	R75MC2470(1)40(4)	
400	200	0.027	4.0	9.0	10.0	7.5	390	312,000	11	8	41.3	2.35	88	75MD2270(1)B0(2)	R75MD2270(1)B0(2)	
400	200	0.033	5.0	10.5	10.0	7.5	390	312,000	13	8	33.8	2.75	78	75MD2330(1)B0(2)	R75MD2330(1)B0(2)	
400	200	0.039	5.0	10.5	10.0	7.5	390	312,000	15	8	28.6	2.99	78	75MD2390(1)B0(2)	R75MD2390(1)B0(2)	
400	200	0.047	5.0	10.5	10.0	7.5	390	312,000	18	8	23.7	3.29	78	75MD2470(1)B0(2)	R75MD2470(1)B0(2)	
400	200	0.056	6.0	12.0	10.5	7.5	390	312,000	22	8	19.9	3.81	69	75MD2560(1)A0(2)	R75MD2560(1)A0(2)	
400	200	0.068	6.0	12.0	10.5	7.5	390	312,000	27	8	16.4	4.20	69	75MD2680(1)A0(2)	R75MD2680(1)A0(2)	
400	220	0.01	4.0	9.0	10.0	7.5	1,500	1,200,000	15	8	79.6	1.38	88	75MD2100(1)40(2)	R75MD2100(1)40(2)	
400	220	0.012	4.0	9.0	10.0	7.5	1,500	1,200,000	18	8	92.8	1.57	88	75MD2120(1)40(2)	R75MD2120(1)40(2)	
400	220	0.015	4.0	9.0	10.0	7.5	1,500	1,200,000	23	8	74.3	1.75	88	75MD2150(1)40(2)	R75MD2150(1)40(2)	
400	220	0.018	4.0	9.0	10.0	7.5	1,500	1,200,000	27	8	61.9	1.92	88	75MD2180(1)40(2)	R75MD2180(1)40(2)	
400	220	0.022	4.0	9.0	10.0	7.5	1,500	1,200,000	33	8	50.6	2.12	88	75MD2220(1)40(2)	R75MD2220(1)40(2)	
400	220	0.027	5.0	10.5	10.0	7.5	1,500	1,200,000	41	8	41.3	2.49	78	75MD2270(1)40(2)	R75MD2270(1)40(2)	
400	220	0.033	5.0	10.5	10.0	7.5	1,500	1,200,000	50	8	33.8	2.75	78	75MD2330(1)40(2)	R75MD2330(1)40(2)	
400	220	0.039	6.0	12.0	10.5	7.5	1,500	1,200,000	59	8	28.6	3.18	69	75MD2390(1)30(2)	R75MD2390(1)30(2)	
400	220	0.047	6.0	12.0	10.5	7.5	1,500	1,200,000	71	8	23.7	3.49	69	75MD2470(1)30(2)	R75MD2470(1)30(2)	
400	220	0.015	4.0	9.0	13.0	10.0	1,300	1,040,000	20	9	74.3	1.85	79	75MF2150(1)00(2)	R75MF2150(1)00(2)	
400	220	0.018	4.0	9.0	13.0	10.0	1,300	1,040,000	23	9	61.9	2.03	79	75MF2180(1)00(2)	R75MF2180(1)00(2)	
400	220	0.022	4.0	9.0	13.0	10.0	1,300	1,040,000	29	9	50.6	2.24	79	75MF2220(1)30(2)	R75MF2220(1)30(2)	
400	220	0.027	4.0	9.0	13.0	10.0	1,300	1,040,000	35	9	41.3	2.48	79	75MF2270(1)30(2)	R75MF2270(1)30(2)	
400	220	0.033	5.0	11.0	13.0	10.0	1,300	1,040,000	43	9	33.8	2.93	69	75MF2330(1)30(2)	R75MF2330(1)30(2)	
400	220	0.039	5.0	11.0	13.0	10.0	1,300	1,040,000	51	9	28.6	3.18	69	75MF2390(1)30(2)	R75MF2390(1)30(2)	
400	220	0.047	5.0	11.0	13.0	10.0	1,300	1,040,000	61	9	23.7	3.50	69	75MF2470(1)30(2)	R75MF2470(1)30(2)	
400	220	0.056	6.0	12.0	13.0	10.0	1,300	1,040,000	73	9	28.4	3.32	64	75MF2560(1)30(2)	R75MF2560(1)30(2)	
400	220	0.068	6.0	12.0	13.0	10.0	1,300	1,040,000	88	9	23.4	3.66	64	75MF2680(1)30(2)	R75MF2680(1)30(2)	
400	220	0.068	5.0	11.0	18.0	15.0	900	720,000	61	10	23.4	3.77	60	75MI2680(1)30(2)	R75MI2680(1)30(2)	
400	220	0.082	5.0	11.0	18.0	15.0	900	720,000	74	10	19.4	4.14	60	75MI2820(1)30(2)	R75MI2820(1)30(2)	
400	220	0.1	5.0	11.0	18.0	15.0	900	720,000	90	10	15.9	4.57	60	75MI3100(1)30(2)	R75MI3100(1)30(2)	
400	220	0.12	6.0	12.0	18.0	15.0	900	720,000	108	10	13.3	5.19	56	75MI3120(1)30(2)	R75MI3120(1)30(2)	
400	220	0.15	6.0	12.0	18.0	15.0	900	720,000	135	10	10.6	5.81	56	75MI3150(1)30(2)	R75MI3150(1)30(2)	
400	220	0.18	7.5	13.5	18.0	15.0	900	720,000	162	10	13.3	5.45	51	75MI3180(1)30(2)	R75MI3180(1)30(2)	
400	220	0.22	7.5	13.5	18.0	15.0	900	720,000	198	10	10.9	6.03	51	75MI3220(1)30(2)	R75MI3220(1)30(2)	
400	220	0.22	9.0	12.5	18.0	15.0	900	720,000	198	10	10.9	6.10	50	75MI3220(1)70(2)	R75MI3220(1)70(2)	
400	220	0.27	8.5	14.5	18.0	15.0	900	720,000	243	10	17.7	4.87	48	75MI3270(1)30(2)	R75MI3270(1)30(2)	
400	220	0.27	9.0	12.5	18.0	15.0	900	720,000	243	10	17.7	4.77	50	75MI3270(1)70(2)	R75MI3270(1)70(2)	
VDC	VAC	Cap Value	T	H	L	Lead Spacing (S)	dV/dt (V/µs)	Max K_v (V ² /µs)	A_{pk}	nH	mΩ	A_{rms}	(°C/W)	KEMET Internal Part Number	Customer Part Number	
										Lead Length 2x 4 mm	at 100 kHz	at 100 kHz, 85°C				
			I_{pk}	ESL	ESR max				I_{rms} max (*)	R_{th}						

(1) Insert lead and packaging code. See Ordering Options Table for available options.
 (2) J = 5%, K = 10%, M = 20%
 (3) K = 10%, M = 20%
 (4) H = 2.5%, J = 5%, K = 10%
 (*) I_{rms} value that leads to a ΔT of $\approx 20^\circ C$ on the box surface $> T_{BOX} = T_{AMB} + \Delta T = 85^\circ C + 20^\circ C = 105^\circ C$

Table 1 – Ratings & Part Number Reference cont.

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (S)	dV/dt (V/µs)	Max K ₀ (V ² /µs)	I _{prk}	ESL	ESR max	I _{rms} max (*)	R _{th}	KEMET Internal Part Number	Customer Part Number
										Lead Length 2x 4 mm	at 100 kHz	at 100 kHz, 85°C			
			A _{prk}	nH	mΩ				A _{rms}	(°C/W)					
400	220	0.33	8.5	14.5	18.0	15.0	900	720,000	297	10	14.5	5.38	48	75MI3330(1)40(2)	R75MI3330(1)40(2)
400	220	0.33	10.0	16.0	18.0	15.0	900	720,000	297	10	14.5	5.60	44	75MI3330(1)30(2)	R75MI3330(1)30(2)
400	220	0.33	13.0	12.0	18.0	15.0	900	720,000	297	10	14.5	5.55	45	75MI3330(1)70(2)	R75MI3330(1)70(2)
400	220	0.39	10.0	16.0	18.0	15.0	900	720,000	351	10	12.2	6.09	44	75MI3390(1)30(2)	R75MI3390(1)30(2)
400	220	0.47	10.0	16.0	18.0	15.0	900	720,000	423	10	10.2	6.68	44	75MI3470(1)30(2)	R75MI3470(1)30(2)
400	220	0.56	11.0	19.0	18.0	15.0	900	720,000	504	10	8.5	7.63	40	75MI3560(1)30(2)	R75MI3560(1)30(2)
400	220	0.68	11.0	19.0	18.0	15.0	900	720,000	612	10	7.0	8.41	40	75MI3680(1)30(2)	R75MI3680(1)30(2)
400	220	0.15	6.0	15.0	26.5	22.5	300	240,000	45	16	18.0	5.05	43	75MN3150(1)30(2)	R75MN3150(1)30(2)
400	220	0.18	6.0	15.0	26.5	22.5	300	240,000	54	16	15.0	5.54	43	75MN3180(1)30(2)	R75MN3180(1)30(2)
400	220	0.22	6.0	15.0	26.5	22.5	300	240,000	66	16	12.3	6.12	43	75MN3220(1)30(2)	R75MN3220(1)30(2)
400	220	0.27	6.0	15.0	26.5	22.5	300	240,000	81	16	11.8	6.25	43	75MN3270(1)30(2)	R75MN3270(1)30(2)
400	220	0.33	6.0	15.0	26.5	22.5	300	240,000	99	16	9.6	6.91	43	75MN3330(1)30(2)	R75MN3330(1)30(2)
400	220	0.39	7.0	16.0	26.5	22.5	300	240,000	117	16	10.2	6.91	41	75MN3390(1)30(2)	R75MN3390(1)30(2)
400	220	0.47	7.0	16.0	26.5	22.5	300	240,000	141	16	8.5	7.59	41	75MN3470(1)30(2)	R75MN3470(1)30(2)
400	220	0.56	8.5	17.0	26.5	22.5	300	240,000	168	16	11.4	6.77	38	75MN3560(1)30(2)	R75MN3560(1)30(2)
400	220	0.68	10.0	18.5	26.5	22.5	300	240,000	204	16	9.4	7.73	36	75MN3680(1)30(2)	R75MN3680(1)30(2)
400	220	0.82	10.0	18.5	26.5	22.5	300	240,000	246	16	9.7	7.59	36	75MN3820(1)30(2)	R75MN3820(1)30(2)
400	220	1	11.0	20.0	26.5	22.5	300	240,000	300	16	8.0	8.60	34	75MN4100(1)30(2)	R75MN4100(1)30(2)
400	220	1.2	11.0	20.0	26.5	22.5	300	240,000	360	16	13.3	6.66	34	75MN4120(1)40(2)	R75MN4120(1)40(2)
400	220	1.2	13.0	22.0	26.5	22.5	300	240,000	360	16	13.3	6.93	31	75MN4120(1)30(2)	R75MN4120(1)30(2)
400	220	1.5	13.0	22.0	26.5	22.5	300	240,000	450	16	10.6	7.75	31	75MN4150(1)30(2)	R75MN4150(1)30(2)
400	220	1.8	14.5	29.5	26.5	22.5	300	240,000	540	16	8.8	9.11	27	75MN4180(1)30(2)	R75MN4180(1)30(2)
400	220	2.2	14.5	29.5	26.5	22.5	300	240,000	660	16	7.2	10.07	27	75MN4220(1)30(2)	R75MN4220(1)30(2)
400	220	0.56	9.0	17.0	32.0	27.5	130	104,000	73	18	11.4	7.10	35	75MR3560(1)30(2)	R75MR3560(1)30(2)
400	220	0.68	9.0	17.0	32.0	27.5	130	104,000	88	18	9.4	7.82	35	75MR3680(1)30(2)	R75MR3680(1)30(2)
400	220	0.82	9.0	17.0	32.0	27.5	130	104,000	107	18	9.7	7.68	35	75MR3820(1)30(2)	R75MR3820(1)30(2)
400	220	1	11.0	20.0	32.0	27.5	130	104,000	130	18	8.0	8.95	31	75MR4100(1)40(2)	R75MR4100(1)40(2)
400	220	1.2	11.0	20.0	32.0	27.5	130	104,000	156	18	13.3	6.93	31	75MR4120(1)30(2)	R75MR4120(1)30(2)
400	220	1.2	24.0	15.0	32.0	27.5	130	104,000	156	18	13.3	7.45	27	75MR4120(1)L3(2)	R75MR4120(1)L3(2)
400	220	1.5	11.0	20.0	32.0	27.5	130	104,000	195	18	10.6	7.75	31	75MR4150(1)40(2)	R75MR4150(1)40(2)
400	220	1.5	13.0	22.0	32.0	27.5	130	104,000	195	18	10.6	8.05	29	75MR4150(1)30(2)	R75MR4150(1)30(2)
400	220	1.8	13.0	22.0	32.0	27.5	130	104,000	234	18	8.8	8.82	29	75MR4180(1)30(2)	R75MR4180(1)30(2)
400	220	1.8	24.0	15.0	32.0	27.5	130	104,000	234	18	8.8	9.13	27	75MR4180(1)L3(2)	R75MR4180(1)L3(2)
400	220	2.2	13.0	25.0	32.0	27.5	130	104,000	286	18	7.2	9.98	28	75MR4220(1)40(2)	R75MR4220(1)40(2)
400	220	2.7	14.0	28.0	32.0	27.5	130	104,000	351	18	8.8	9.31	26	75MR4270(1)30(2)	R75MR4270(1)30(2)
400	220	3.3	18.0	33.0	32.0	27.5	130	104,000	429	18	7.2	10.98	23	75MR4330(1)30(2)	R75MR4330(1)30(2)
400	220	3.9	18.0	33.0	32.0	27.5	130	104,000	507	18	6.1	11.93	23	75MR4390(1)30(2)	R75MR4390(1)30(2)
400	220	4.7	22.0	37.0	32.0	27.5	130	104,000	611	18	5.1	13.77	21	75MR4470(1)30(2)	R75MR4470(1)30(2)
400	220	5.6	22.0	37.0	32.0	27.5	130	104,000	728	18	4.3	15.03	21	75MR4560(1)30(2)	R75MR4560(1)30(2)
400	220	1.2	11.0	22.0	41.5	37.5	70	56,000	84	20	13.3	7.46	27	75MW4120(1)30(2)	R75MW4120(1)30(2)
400	220	1.5	11.0	22.0	41.5	37.5	70	56,000	105	20	10.6	8.34	27	75MW4150(1)30(2)	R75MW4150(1)30(2)
400	220	1.8	11.0	22.0	41.5	37.5	70	56,000	126	20	8.8	9.14	27	75MW4180(1)30(2)	R75MW4180(1)30(2)
400	220	2.2	11.0	22.0	41.5	37.5	70	56,000	154	20	7.2	10.10	27	75MW4220(1)30(2)	R75MW4220(1)30(2)
400	220	2.7	13.0	24.0	41.5	37.5	70	56,000	189	20	8.8	9.46	25	75MW4270(1)30(2)	R75MW4270(1)30(2)
400	220	2.7	24.0	15.0	41.5	37.5	70	56,000	189	20	8.8	9.63	24	75MW4270(1)L3(2)	R75MW4270(1)L3(2)
400	220	3.3	16.0	28.5	41.5	37.5	70	56,000	231	20	7.2	11.07	23	75MW4330(1)30(2)	R75MW4330(1)30(2)
400	220	3.3	24.0	19.0	41.5	37.5	70	56,000	231	20	7.2	11.00	23	75MW4330(1)L3(2)	R75MW4330(1)L3(2)
400	220	3.9	16.0	28.5	41.5	37.5	70	56,000	273	20	6.1	12.04	23	75MW4390(1)30(2)	R75MW4390(1)30(2)
400	220	3.9	24.0	19.0	41.5	37.5	70	56,000	273	20	6.1	11.95	23	75MW4390(1)L3(2)	R75MW4390(1)L3(2)
400	220	4.7	19.0	32.0	41.5	37.5	70	56,000	329	20	5.1	13.80	21	75MW4470(1)30(2)	R75MW4470(1)30(2)
VDC	VAC	Cap Value	T	H	L	Lead Spacing (S)	dV/dt (V/µs)	Max K ₀ (V ² /µs)	A _{prk}	Lead Length 2x 4 mm	at 100 kHz	A _{rms}	(°C/W)	KEMET Internal Part Number	Customer Part Number
			Dimensions						I _{prk}	ESL	ESR max	I _{rms} max (*)			
										nH	mΩ	A _{rms}			
										ESL	ESR max	I _{rms} max (*)	R _{th}		

(1) Insert lead and packaging code. See Ordering Options Table for available options.
 (2) J = 5%, K = 10%, M = 20%
 (3) K = 10%, M = 20%
 (4) H = 2.5%, J = 5%, K = 10%
 (*) I_{rms} value that leads to a ΔT of ≈ 20°C on the box surface > T_{BOX} = T_{AMB} + ΔT = 85°C + 20°C = 105°C

Table 1 – Ratings & Part Number Reference cont.

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (S)	dV/dt (V/µs)	Max K_0 (V ² /µs)	I_{pk}	ESL	ESR max	I_{rms} max (*)		R_{th}	KEMET Internal Part Number	Customer Part Number
										Lead Length 2x 4 mm	at 100 kHz	at 100 kHz, 85°C				
			A_{pk}	nH	mΩ								A_{rms}			
400	220	5.6	19.0	32.0	41.5	37.5	70	56,000	392	20	4.3	15.06	21	75MW4560(1)30(2)	R75MW4560(1)30(2)	
400	220	6.8	20.0	40.0	41.5	37.5	70	56,000	476	20	7.0	12.32	19	75MW4680(1)20(2)	R75MW4680(1)20(2)	
400	220	8.2	20.0	40.0	41.5	37.5	70	56,000	574	20	5.8	13.53	19	75MW4820(1)30(2)	R75MW4820(1)30(2)	
400	220	10	24.0	44.0	41.5	37.5	70	56,000	700	20	4.8	15.59	17	75MW5100(1)30(2)	R75MW5100(1)30(2)	
400	220	12	30.0	45.0	41.5	37.5	70	56,000	840	20	4.0	17.71	16	75MW5120(1)20(2)	R75MW5120(1)20(2)	
400	220	15	30.0	45.0	41.5	37.5	70	56,000	1,050	20	3.2	19.80	16	75MW5150(1)30(2)	R75MW5150(1)30(2)	
630	220	0.001	3.5	7.5	7.2	5.0	500	630,000	1	7	4774.6	0.14	111	75PC1100(1)40(4)	R75PC1100(1)40(4)	
630	220	0.0012	3.5	7.5	7.2	5.0	500	630,000	1	7	3978.9	0.17	111	75PC1120(1)40(4)	R75PC1120(1)40(4)	
630	220	0.0015	3.5	7.5	7.2	5.0	500	630,000	1	7	3183.1	0.21	111	75PC1150(1)40(4)	R75PC1150(1)40(4)	
630	220	0.0018	3.5	7.5	7.2	5.0	500	630,000	1	7	2652.6	0.25	111	75PC1180(1)40(4)	R75PC1180(1)40(4)	
630	220	0.0022	3.5	7.5	7.2	5.0	500	630,000	1	7	2170.3	0.29	111	75PC1220(1)40(4)	R75PC1220(1)40(4)	
630	220	0.0027	3.5	7.5	7.2	5.0	500	630,000	1	7	1768.4	0.32	111	75PC1270(1)40(4)	R75PC1270(1)40(4)	
630	220	0.0033	3.5	7.5	7.2	5.0	500	630,000	2	7	1446.9	0.35	111	75PC1330(1)40(4)	R75PC1330(1)40(4)	
630	220	0.0039	4.5	9.5	7.2	5.0	600	756,000	2	7	1224.3	0.42	94	75PC1390(1)40(4)	R75PC1390(1)40(4)	
630	220	0.0047	4.5	9.5	7.2	5.0	600	756,000	3	7	1015.9	0.46	94	75PC1470(1)40(4)	R75PC1470(1)40(4)	
630	220	0.0056	4.5	9.5	7.2	5.0	600	756,000	3	7	852.6	0.50	94	75PC1560(1)40(4)	R75PC1560(1)40(4)	
630	220	0.0068	5.0	10.0	7.2	5.0	600	756,000	4	7	702.2	0.56	90	75PC1680(1)40(4)	R75PC1680(1)40(4)	
630	220	0.0082	5.0	10.0	7.2	5.0	600	756,000	5	7	582.3	0.62	90	75PC1820(1)40(4)	R75PC1820(1)40(4)	
630	220	0.01	6.0	11.0	7.2	5.0	600	756,000	6	7	477.5	0.71	82	75PC2100(1)40(4)	R75PC2100(1)40(4)	
630	220	0.012	6.0	11.0	7.2	5.0	600	756,000	7	7	397.9	0.78	82	75PC2120(1)40(4)	R75PC2120(1)40(4)	
630	220	0.015	7.2	13.0	7.2	5.0	600	756,000	9	7	318.3	0.93	73	75PC2150(1)40(4)	R75PC2150(1)40(4)	
630	220	0.018	7.2	13.0	7.2	5.0	600	756,000	11	7	265.3	1.02	73	75PC2180(1)40(4)	R75PC2180(1)40(4)	
630	220	0.01	4.0	9.0	10.0	7.5	600	756,000	6	8	79.6	1.38	88	75PD2100(1)B0(2)	R75PD2100(1)B0(2)	
630	220	0.012	4.0	9.0	10.0	7.5	600	756,000	7	8	92.8	1.57	88	75PD2120(1)B0(2)	R75PD2120(1)B0(2)	
630	220	0.015	5.0	10.5	10.0	7.5	600	756,000	9	8	74.3	1.86	78	75PD2150(1)B0(2)	R75PD2150(1)B0(2)	
630	220	0.018	5.0	10.5	10.0	7.5	600	756,000	11	8	61.9	2.03	78	75PD2180(1)B0(2)	R75PD2180(1)B0(2)	
630	220	0.022	6.0	12.0	10.5	7.5	600	756,000	13	8	50.6	2.39	69	75PD2220(1)A0(2)	R75PD2220(1)A0(2)	
630	220	0.027	6.0	12.0	10.5	7.5	600	756,000	16	8	41.3	2.64	69	75PD2270(1)A0(2)	R75PD2270(1)A0(2)	
630	250	0.0033	4.0	9.0	10.0	7.5	2,400	3,024,000	8	8	241.1	0.52	88	75PD1330(1)40(2)	R75PD1330(1)40(2)	
630	250	0.0039	4.0	9.0	10.0	7.5	2,400	3,024,000	9	8	204.0	0.61	88	75PD1390(1)40(2)	R75PD1390(1)40(2)	
630	250	0.0047	4.0	9.0	10.0	7.5	2,400	3,024,000	11	8	169.3	0.74	88	75PD1470(1)40(2)	R75PD1470(1)40(2)	
630	250	0.0056	4.0	9.0	10.0	7.5	2,400	3,024,000	13	8	142.1	0.88	88	75PD1560(1)40(2)	R75PD1560(1)40(2)	
630	250	0.0068	4.0	9.0	10.0	7.5	2,400	3,024,000	16	8	117.0	1.07	88	75PD1680(1)40(2)	R75PD1680(1)40(2)	
630	250	0.0082	4.0	9.0	10.0	7.5	2,400	3,024,000	20	8	97.0	1.29	88	75PD1820(1)40(2)	R75PD1820(1)40(2)	
630	250	0.01	5.0	10.5	10.0	7.5	2,400	3,024,000	24	8	79.6	1.57	78	75PD2100(1)40(2)	R75PD2100(1)40(2)	
630	250	0.012	5.0	10.5	10.0	7.5	2,400	3,024,000	29	8	92.8	1.66	78	75PD2120(1)40(2)	R75PD2120(1)40(2)	
630	250	0.015	6.0	12.0	10.5	7.5	2,400	3,024,000	36	8	74.3	1.97	69	75PD2150(1)30(2)	R75PD2150(1)30(2)	
630	250	0.018	6.0	12.0	10.5	7.5	2,400	3,024,000	43	8	61.9	2.16	69	75PD2180(1)30(2)	R75PD2180(1)30(2)	
630	250	0.001	4.0	9.0	13.0	10.0	2,000	2,520,000	2	9	795.8	0.16	79	75PF1100(1)01(2)	R75PF1100(1)01(2)	
630	250	0.0012	4.0	9.0	13.0	10.0	2,000	2,520,000	2	9	663.1	0.19	79	75PF1120(1)01(2)	R75PF1120(1)01(2)	
630	250	0.0015	4.0	9.0	13.0	10.0	2,000	2,520,000	3	9	530.5	0.24	79	75PF1150(1)01(2)	R75PF1150(1)01(2)	
630	250	0.0018	4.0	9.0	13.0	10.0	2,000	2,520,000	4	9	442.1	0.28	79	75PF1180(1)01(2)	R75PF1180(1)01(2)	
630	250	0.0022	4.0	9.0	13.0	10.0	2,000	2,520,000	4	9	361.7	0.35	79	75PF1220(1)01(2)	R75PF1220(1)01(2)	
630	250	0.0027	4.0	9.0	13.0	10.0	2,000	2,520,000	5	9	294.7	0.42	79	75PF1270(1)01(2)	R75PF1270(1)01(2)	
630	250	0.0033	4.0	9.0	13.0	10.0	2,000	2,520,000	7	9	241.1	0.52	79	75PF1330(1)01(2)	R75PF1330(1)01(2)	
630	250	0.0039	4.0	9.0	13.0	10.0	2,000	2,520,000	8	9	204.0	0.61	79	75PF1390(1)01(2)	R75PF1390(1)01(2)	
630	250	0.0047	4.0	9.0	13.0	10.0	2,000	2,520,000	9	9	169.3	0.74	79	75PF1470(1)00(2)	R75PF1470(1)00(2)	
630	250	0.0056	4.0	9.0	13.0	10.0	2,000	2,520,000	11	9	142.1	0.88	79	75PF1560(1)00(2)	R75PF1560(1)00(2)	
630	250	0.0068	4.0	9.0	13.0	10.0	2,000	2,520,000	14	9	117.0	1.07	79	75PF1680(1)00(2)	R75PF1680(1)00(2)	
630	250	0.0082	4.0	9.0	13.0	10.0	2,000	2,520,000	16	9	97.0	1.29	79	75PF1820(1)00(2)	R75PF1820(1)00(2)	

VDC	VAC	Cap Value	T	H	L	Lead Spacing (S)	dV/dt (V/µs)	Max K_0 (V ² /µs)	A_{pk}	nH	mΩ	A_{rms}	R_{th}	KEMET Internal Part Number	Customer Part Number
										Lead Length 2x 4 mm	at 100 kHz	at 100 kHz, 85°C			
			Dimensions												

(1) Insert lead and packaging code. See Ordering Options Table for available options.
 (2) J = 5%, K = 10%, M = 20%
 (3) K = 10%, M = 20%
 (4) H = 2.5%, J = 5%, K = 10%
 (*) I_{rms} value that leads to a ΔT of $\approx 20^\circ\text{C}$ on the box surface $> T_{BO} = T_{AMB} + \Delta T = 85^\circ\text{C} + 20^\circ\text{C} = 105^\circ\text{C}$

Table 1 – Ratings & Part Number Reference cont.

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (S)	dV/dt (V/µs)	Max K_0 ($V^2/\mu s$)	I_{pk}	ESL	ESR max	I_{rms} max (*)		R_{th}	KEMET Internal Part Number	Customer Part Number
										Lead Length 2x 4 mm	at 100 kHz	at 100 kHz, 85°C	(°C/W)			
			A_{pk}	nH	mΩ				A_{rms}	(°C/W)						
630	250	0.01	4.0	9.0	13.0	10.0	2,000	2,520,000	20	9	79.6	1.57	79	75PF2100(1)30(2)	R75PF2100(1)30(2)	
630	250	0.012	4.0	9.0	13.0	10.0	2,000	2,520,000	24	9	92.8	1.66	79	75PF2120(1)30(2)	R75PF2120(1)30(2)	
630	250	0.015	4.0	9.0	13.0	10.0	2,000	2,520,000	30	9	74.3	1.85	79	75PF2150(1)40(2)	R75PF2150(1)40(2)	
630	250	0.015	5.0	11.0	13.0	10.0	2,000	2,520,000	30	9	74.3	1.97	69	75PF2150(1)30(2)	R75PF2150(1)30(2)	
630	250	0.018	4.0	9.0	13.0	10.0	2,000	2,520,000	36	9	61.9	2.03	79	75PF2180(1)40(2)	R75PF2180(1)40(2)	
630	250	0.018	5.0	11.0	13.0	10.0	2,000	2,520,000	36	9	61.9	2.16	69	75PF2180(1)30(2)	R75PF2180(1)30(2)	
630	250	0.022	5.0	11.0	13.0	10.0	2,000	2,520,000	44	9	50.6	2.39	69	75PF2220(1)40(2)	R75PF2220(1)40(2)	
630	250	0.022	6.0	12.0	13.0	10.0	2,000	2,520,000	44	9	50.6	2.49	64	75PF2220(1)30(2)	R75PF2220(1)30(2)	
630	250	0.027	5.0	11.0	13.0	10.0	2,000	2,520,000	54	9	41.3	2.65	69	75PF2270(1)40(2)	R75PF2270(1)40(2)	
630	250	0.033	6.0	12.0	13.0	10.0	2,000	2,520,000	66	9	33.8	3.05	64	75PF2330(1)40(2)	R75PF2330(1)40(2)	
630	250	0.039	6.0	12.0	13.0	10.0	2,000	2,520,000	78	9	28.6	3.31	64	75PF2390(1)40(2)	R75PF2390(1)40(2)	
630	250	0.047	6.0	12.0	13.0	10.0	2,000	2,520,000	94	9	23.7	3.63	64	75PF2470(1)40(2)	R75PF2470(1)40(2)	
630	250	0.027	5.0	11.0	18.0	15.0	1,000	1,260,000	27	10	41.3	2.84	60	75PI2270(1)00(2)	R75PI2270(1)00(2)	
630	250	0.033	5.0	11.0	18.0	15.0	1,000	1,260,000	33	10	33.8	3.14	60	75PI2330(1)00(2)	R75PI2330(1)00(2)	
630	250	0.039	5.0	11.0	18.0	15.0	1,000	1,260,000	39	10	28.6	3.41	60	75PI2390(1)30(2)	R75PI2390(1)30(2)	
630	250	0.047	5.0	11.0	18.0	15.0	1,000	1,260,000	47	10	23.7	3.74	60	75PI2470(1)30(2)	R75PI2470(1)30(2)	
630	250	0.056	5.0	11.0	18.0	15.0	1,000	1,260,000	56	10	28.4	3.42	60	75PI2560(1)30(2)	R75PI2560(1)30(2)	
630	250	0.068	6.0	12.0	18.0	15.0	1,000	1,260,000	68	10	23.4	3.91	56	75PI2680(1)30(2)	R75PI2680(1)30(2)	
630	250	0.082	6.0	12.0	18.0	15.0	1,000	1,260,000	82	10	19.4	4.29	56	75PI2820(1)30(2)	R75PI2820(1)30(2)	
630	250	0.1	7.5	13.5	18.0	15.0	1,000	1,260,000	100	10	15.9	4.98	51	75PI3100(1)30(2)	R75PI3100(1)30(2)	
630	250	0.1	9.0	12.5	18.0	15.0	1,000	1,260,000	100	10	15.9	5.03	50	75PI3100(1)70(2)	R75PI3100(1)70(2)	
630	250	0.12	7.5	13.5	18.0	15.0	1,000	1,260,000	120	10	13.3	5.45	51	75PI3120(1)30(2)	R75PI3120(1)30(2)	
630	250	0.12	9.0	12.5	18.0	15.0	1,000	1,260,000	120	10	13.3	5.51	50	75PI3120(1)70(2)	R75PI3120(1)70(2)	
630	250	0.15	8.5	14.5	18.0	15.0	1,000	1,260,000	150	10	10.6	6.28	48	75PI3150(1)30(2)	R75PI3150(1)30(2)	
630	250	0.15	13.0	12.0	18.0	15.0	1,000	1,260,000	150	10	10.6	6.48	45	75PI3150(1)70(2)	R75PI3150(1)70(2)	
630	250	0.18	10.0	16.0	18.0	15.0	1,000	1,260,000	180	10	13.3	5.85	44	75PI3180(1)30(2)	R75PI3180(1)30(2)	
630	250	0.18	13.0	12.0	18.0	15.0	1,000	1,260,000	180	10	13.3	5.80	45	75PI3180(1)70(2)	R75PI3180(1)70(2)	
630	250	0.22	10.0	16.0	18.0	15.0	1,000	1,260,000	220	10	10.9	6.47	44	75PI3220(1)30(2)	R75PI3220(1)30(2)	
630	250	0.27	11.0	19.0	18.0	15.0	1,000	1,260,000	270	10	17.7	5.30	40	75PI3270(1)30(2)	R75PI3270(1)30(2)	
630	250	0.33	11.0	19.0	18.0	15.0	1,000	1,260,000	330	10	14.5	5.86	40	75PI3330(1)30(2)	R75PI3330(1)30(2)	
630	250	0.39	11.0	19.0	18.0	15.0	1,000	1,260,000	390	10	12.2	6.37	40	75PI3390(1)30(2)	R75PI3390(1)30(2)	
630	250	0.082	6.0	15.0	26.5	22.5	400	504,000	33	16	33.0	3.74	43	75PN2820(1)30(2)	R75PN2820(1)30(2)	
630	250	0.1	6.0	15.0	26.5	22.5	400	504,000	40	16	27.1	4.13	43	75PN3100(1)30(2)	R75PN3100(1)30(2)	
630	250	0.12	6.0	15.0	26.5	22.5	400	504,000	48	16	22.5	4.52	43	75PN3120(1)30(2)	R75PN3120(1)30(2)	
630	250	0.15	6.0	15.0	26.5	22.5	400	504,000	60	16	18.0	5.05	43	75PN3150(1)30(2)	R75PN3150(1)30(2)	
630	250	0.18	7.0	16.0	26.5	22.5	400	504,000	72	16	15.0	5.69	41	75PN3180(1)30(2)	R75PN3180(1)30(2)	
630	250	0.22	7.0	16.0	26.5	22.5	400	504,000	88	16	12.3	6.30	41	75PN3220(1)30(2)	R75PN3220(1)30(2)	
630	250	0.27	8.5	17.0	26.5	22.5	400	504,000	108	16	11.8	6.65	38	75PN3270(1)30(2)	R75PN3270(1)30(2)	
630	250	0.33	10.0	18.5	26.5	22.5	400	504,000	132	16	9.6	7.61	36	75PN3330(1)30(2)	R75PN3330(1)30(2)	
630	250	0.39	10.0	18.5	26.5	22.5	400	504,000	156	16	10.2	7.40	36	75PN3390(1)30(2)	R75PN3390(1)30(2)	
630	250	0.47	11.0	20.0	26.5	22.5	400	504,000	188	16	8.5	8.34	34	75PN3470(1)30(2)	R75PN3470(1)30(2)	
630	250	0.56	11.0	20.0	26.5	22.5	400	504,000	224	16	11.4	7.20	34	75PN3560(1)30(2)	R75PN3560(1)30(2)	
630	250	0.68	13.0	22.0	26.5	22.5	400	504,000	272	16	9.4	8.25	31	75PN3680(1)30(2)	R75PN3680(1)30(2)	
630	250	0.82	13.0	22.0	26.5	22.5	400	504,000	328	16	9.7	8.10	31	75PN3820(1)30(2)	R75PN3820(1)30(2)	
630	250	1	14.5	29.5	26.5	22.5	400	504,000	400	16	8.0	9.60	27	75PN4100(1)30(2)	R75PN4100(1)30(2)	
630	250	1.2	14.5	29.5	26.5	22.5	400	504,000	480	16	13.3	7.44	27	75PN4120(1)30(2)	R75PN4120(1)30(2)	
630	250	0.39	9.0	17.0	32.0	27.5	210	264,600	82	18	10.2	7.49	35	75PR3390(1)30(2)	R75PR3390(1)30(2)	
630	250	0.47	9.0	17.0	32.0	27.5	210	264,600	99	18	8.5	8.22	35	75PR3470(1)40(2)	R75PR3470(1)40(2)	
630	250	0.56	11.0	20.0	32.0	27.5	210	264,600	118	18	11.4	7.49	31	75PR3560(1)30(2)	R75PR3560(1)30(2)	
630	250	0.68	11.0	20.0	32.0	27.5	210	264,600	143	18	9.4	8.25	31	75PR3680(1)30(2)	R75PR3680(1)30(2)	

(1) Insert lead and packaging code. See Ordering Options Table for available options.

(2) J = 5%, K = 10%, M = 20%

(3) K = 10%, M = 20%

(4) H = 2.5%, J = 5%, K = 10%

(*) I_{rms} value that leads to a ΔT of $\approx 20^\circ C$ on the box surface $> T_{BOX} = T_{AMB} + \Delta T = 85^\circ C + 20^\circ C = 105^\circ C$

Table 1 – Ratings & Part Number Reference cont.

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (S)	dV/dt (V/µs)	Max K _t (V ² /µs)	I _{pk}	ESL	ESR max	I _{rms} max (*)		R _{th}	KEMET Internal Part Number	Customer Part Number
										Lead Length 2x 4 mm	at 100 kHz	at 100 kHz, 85°C	A _{rms}			
			T	H	L				A _{pk}	nH	mΩ	(°C/W)				
1250	600	0.082	10.0	18.5	26.5	22.5	2,100	5,250,000	172	16	13.6	6.41	36	75RN2820(1)30(2)	R75RN2820(1)30(2)	
1250	600	0.1	10.0	18.5	26.5	22.5	2,100	5,250,000	210	16	11.1	7.08	36	75RN3100(1)30(2)	R75RN3100(1)30(2)	
1250	600	0.12	11.0	20.0	26.5	22.5	2,100	5,250,000	252	16	9.3	7.97	34	75RN3120(1)30(2)	R75RN3120(1)30(2)	
1250	600	0.15	13.0	22.0	26.5	22.5	2,100	5,250,000	315	16	7.4	9.26	31	75RN3150(1)30(2)	R75RN3150(1)30(2)	
1250	600	0.18	13.0	22.0	26.5	22.5	2,100	5,250,000	378	16	6.2	10.15	31	75RN3180(1)30(2)	R75RN3180(1)30(2)	
1250	600	0.22	14.5	29.5	26.5	22.5	2,100	5,250,000	462	16	5.1	12.04	27	75RN3220(1)30(2)	R75RN3220(1)30(2)	
1250	600	0.068	9.0	17.0	32.0	27.5	750	1,875,000	51	18	16.4	5.91	35	75RR2680(1)40(2)	R75RR2680(1)40(2)	
1250	600	0.082	9.0	17.0	32.0	27.5	750	1,875,000	62	18	13.6	6.49	35	75RR2820(1)40(2)	R75RR2820(1)40(2)	
1250	600	0.1	9.0	17.0	32.0	27.5	750	1,875,000	75	18	11.1	7.17	35	75RR3100(1)40(2)	R75RR3100(1)40(2)	
1250	600	0.12	9.0	17.0	32.0	27.5	750	1,875,000	90	18	9.3	7.85	35	75RR3120(1)40(2)	R75RR3120(1)40(2)	
1250	600	0.15	11.0	20.0	32.0	27.5	750	1,875,000	113	18	7.4	9.26	31	75RR3150(1)40(2)	R75RR3150(1)40(2)	
1250	600	0.18	11.0	20.0	32.0	27.5	750	1,875,000	135	18	6.2	10.14	31	75RR3180(1)40(2)	R75RR3180(1)40(2)	
1250	600	0.18	24.0	15.0	32.0	27.5	750	1,875,000	135	18	6.2	10.91	27	75RR3180(1)L4(2)	R75RR3180(1)40(2)	
1250	600	0.22	13.0	22.0	32.0	27.5	750	1,875,000	165	18	5.1	11.65	29	75RR3220(1)40(2)	R75RR3220(1)40(2)	
1250	600	0.22	24.0	15.0	32.0	27.5	750	1,875,000	165	18	5.1	12.06	27	75RR3220(1)L4(2)	R75RR3220(1)40(2)	
1250	600	0.27	13.0	25.0	32.0	27.5	750	1,875,000	203	18	10.0	8.48	28	75RR3270(1)40(2)	R75RR3270(1)40(2)	
1250	600	0.33	14.0	28.0	32.0	27.5	750	1,875,000	248	18	8.2	9.67	26	75RR3300(1)30(2)	R75RR3300(1)30(2)	
1250	600	0.39	18.0	33.0	32.0	27.5	750	1,875,000	293	18	8.2	10.33	23	75RR3390(1)40(2)	R75RR3390(1)40(2)	
1250	600	0.47	18.0	33.0	32.0	27.5	750	1,875,000	353	18	6.8	11.35	23	75RR3470(1)40(2)	R75RR3470(1)40(2)	
1250	600	0.56	18.0	33.0	32.0	27.5	750	1,875,000	420	18	5.7	12.38	23	75RR3560(1)40(2)	R75RR3560(1)40(2)	
1250	600	0.68	22.0	37.0	32.0	27.5	750	1,875,000	510	18	4.7	14.35	21	75RR3680(1)40(2)	R75RR3680(1)40(2)	
1250	600	0.82	22.0	37.0	32.0	27.5	750	1,875,000	615	18	3.9	15.75	21	75RR3820(1)40(2)	R75RR3820(1)40(2)	
1250	600	0.15	11.0	22.0	41.5	37.5	550	1,375,000	83	20	7.4	9.97	27	75RW3150(1)30(2)	R75RW3150(1)30(2)	
1250	600	0.22	11.0	22.0	41.5	37.5	550	1,375,000	121	20	5.1	12.07	27	75RW3220(1)30(2)	R75RW3220(1)30(2)	
1250	600	0.27	11.0	22.0	41.5	37.5	550	1,375,000	149	20	10.0	8.58	27	75RW3270(1)30(2)	R75RW3270(1)30(2)	
1250	600	0.27	24.0	15.0	41.5	37.5	550	1,375,000	149	20	10.0	9.05	24	75RW3270(1)L3(2)	R75RW3270(1)30(2)	
1250	600	0.33	13.0	24.0	41.5	37.5	550	1,375,000	182	20	8.2	9.83	25	75RW3330(1)20(2)	R75RW3330(1)20(2)	
1250	600	0.39	13.0	24.0	41.5	37.5	550	1,375,000	215	20	8.2	9.85	25	75RW3390(1)30(2)	R75RW3390(1)30(2)	
1250	600	0.39	24.0	15.0	41.5	37.5	550	1,375,000	215	20	8.2	10.02	24	75RW3390(1)L3(2)	R75RW3390(1)30(2)	
1250	600	0.47	16.0	28.5	41.5	37.5	550	1,375,000	259	20	6.8	11.44	23	75RW3470(1)40(2)	R75RW3470(1)40(2)	
1250	600	0.47	24.0	19.0	41.5	37.5	550	1,375,000	259	20	6.8	11.36	23	75RW3470(1)L4(2)	R75RW3470(1)40(2)	
1250	600	0.56	16.0	28.5	41.5	37.5	550	1,375,000	308	20	5.7	12.49	23	75RW3560(1)40(2)	R75RW3560(1)40(2)	
1250	600	0.68	19.0	32.0	41.5	37.5	550	1,375,000	374	20	4.7	14.38	21	75RW3680(1)30(2)	R75RW3680(1)40(2)	
1250	600	0.82	19.0	32.0	41.5	37.5	550	1,375,000	451	20	3.9	15.79	21	75RW3820(1)40(2)	R75RW3820(1)40(2)	
1250	600	1	20.0	40.0	41.5	37.5	550	1,375,000	550	20	3.2	18.30	19	75RW4100(1)30(2)	R75RW4100(1)30(2)	
1250	600	1.2	20.0	40.0	41.5	37.5	550	1,375,000	660	20	4.0	16.37	19	75RW4120(1)40(2)	R75RW4120(1)40(2)	
1250	600	1.5	24.0	44.0	41.5	37.5	550	1,375,000	825	20	3.2	19.10	17	75RW4150(1)40(2)	R75RW4150(1)40(2)	
1250	600	1.8	30.0	45.0	41.5	37.5	550	1,375,000	990	20	2.7	21.69	16	75RW4180(1)20(2)	R75RW4180(1)20(2)	
1300	400	0.0068	5.0	11.0	18.0	15.0	2,000	5,200,000	14	10	117.0	1.68	60	75JI1680(1)00(2)	R75JI1680(1)00(2)	
1300	400	0.0082	5.0	11.0	18.0	15.0	2,000	5,200,000	16	10	97.0	1.85	60	75JI1820(1)00(2)	R75JI1820(1)00(2)	
1300	400	0.01	5.0	11.0	18.0	15.0	2,000	5,200,000	20	10	79.6	2.04	60	75JI2100(1)00(2)	R75JI2100(1)00(2)	
1300	400	0.012	6.0	12.0	18.0	15.0	2,000	5,200,000	24	10	92.8	1.96	56	75JI2120(1)00(2)	R75JI2120(1)00(2)	
1300	400	0.015	6.0	12.0	18.0	15.0	2,000	5,200,000	30	10	74.3	2.19	56	75JI2150(1)00(2)	R75JI2150(1)00(2)	
1300	400	0.018	7.5	13.5	18.0	15.0	2,000	5,200,000	36	10	61.9	2.53	51	75JI2180(1)00(2)	R75JI2180(1)00(2)	
1300	400	0.022	7.5	13.5	18.0	15.0	2,000	5,200,000	44	10	50.6	2.79	51	75JI2220(1)00(2)	R75JI2220(1)00(2)	
1300	400	0.027	8.5	14.5	18.0	15.0	2,000	5,200,000	54	10	41.3	3.19	48	75JI2270(1)00(2)	R75JI2270(1)00(2)	
1300	400	0.033	8.5	14.5	18.0	15.0	2,000	5,200,000	66	10	33.8	3.52	48	75JI2330(1)00(2)	R75JI2330(1)00(2)	
1300	400	0.039	10.0	16.0	18.0	15.0	2,000	5,200,000	78	10	28.6	3.99	44	75JI2390(1)00(2)	R75JI2390(1)00(2)	
1300	400	0.047	10.0	16.0	18.0	15.0	2,000	5,200,000	94	10	23.7	4.38	44	75JI2470(1)00(2)	R75JI2470(1)00(2)	
1300	400	0.056	11.0	19.0	18.0	15.0	2,000	5,200,000	112	10	28.4	4.18	40	75JI2560(1)00(2)	R75JI2560(1)00(2)	
VDC	VAC	Cap Value	T	H	L	Lead Spacing (S)	dV/dt (V/µs)	Max K _t (V ² /µs)	A _{pk}	Lead Length 2x 4 mm	at 100 kHz	A _{rms}	(°C/W)	KEMET Internal Part Number	Customer Part Number	
									I _{pk}	ESL	ESR max	I _{rms} max (*)				

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) J = 5%, K = 10%, M = 20%
(3) K = 10%, M = 20%
(4) H = 2.5%, J = 5%, K = 10%
(*) I_{rms} value that leads to a ΔT of ≈ 20°C on the box surface > T_{BOX} = T_{AMB} + ΔT = 85°C + 20°C = 105°C

Table 1 – Ratings & Part Number Reference cont.

VDC	VAC	Cap Value (µF)	Dimensions in mm			Lead Spacing (S)	dV/dt (V/µs)	Max K ₀ (V ² /µs)	I _{pk}	ESL	ESR max	I _{rms} max (*)		R _{th}	KEMET Internal Part Number	Customer Part Number
										Lead Length 2x 4 mm	at 100 kHz	at 100 kHz, 85°C				
			A _{pk}	nH	mΩ				A _{rms}	(°C/W)						
2000	700	0.22	14.0	28.0	32.0	27.5	2,000	8,000,000	440	18	5.1	12.30	26	75UR3220(1)40(2)	R75UR3220(1)40(2)	
2000	700	0.27	18.0	33.0	32.0	27.5	2,000	8,000,000	540	18	10.0	9.33	23	75UR3270(1)30(2)	R75UR3270(1)30(2)	
2000	700	0.33	18.0	33.0	32.0	27.5	2,000	8,000,000	660	18	8.2	10.31	23	75UR3330(1)40(2)	R75UR3330(1)40(2)	
2000	700	0.39	22.0	37.0	32.0	27.5	2,000	8,000,000	780	18	8.2	10.86	21	75UR3390(1)30(2)	R75UR3390(1)30(2)	
2000	700	0.47	22.0	37.0	32.0	27.5	2,000	8,000,000	940	18	6.8	11.93	21	75UR3470(1)40(2)	R75UR3470(1)40(2)	
2000	700	0.068	11.0	22.0	41.5	37.5	700	2,800,000	48	20	16.4	6.71	27	75UW2680(1)30(2)	R75UW2680(1)30(2)	
2000	700	0.082	11.0	22.0	41.5	37.5	700	2,800,000	57	20	13.6	7.37	27	75UW2820(1)30(2)	R75UW2820(1)30(2)	
2000	700	0.1	11.0	22.0	41.5	37.5	700	2,800,000	70	20	11.1	8.14	27	75UW3100(1)30(2)	R75UW3100(1)30(2)	
2000	700	0.1	24.0	15.0	41.5	37.5	700	2,800,000	70	20	11.1	8.58	24	75UW3100(1)L3(2)	R75UW3100(1)L3(2)	
2000	700	0.12	11.0	22.0	41.5	37.5	700	2,800,000	84	20	9.3	8.91	27	75UW3120(1)30(2)	R75UW3120(1)30(2)	
2000	700	0.12	24.0	15.0	41.5	37.5	700	2,800,000	84	20	9.3	9.40	24	75UW3120(1)L3(2)	R75UW3120(1)L3(2)	
2000	700	0.15	11.0	22.0	41.5	37.5	700	2,800,000	105	20	7.4	9.97	27	75UW3150(1)30(2)	R75UW3150(1)30(2)	
2000	700	0.15	24.0	15.0	41.5	37.5	700	2,800,000	105	20	7.4	10.51	24	75UW3150(1)L3(2)	R75UW3150(1)L3(2)	
2000	700	0.18	13.0	24.0	41.5	37.5	700	2,800,000	126	20	6.2	11.31	25	75UW3180(1)30(2)	R75UW3180(1)30(2)	
2000	700	0.18	24.0	15.0	41.5	37.5	700	2,800,000	126	20	6.2	11.51	24	75UW3180(1)L3(2)	R75UW3180(1)L3(2)	
2000	700	0.22	13.0	24.0	41.5	37.5	700	2,800,000	154	20	5.1	12.50	25	75UW3220(1)30(2)	R75UW3220(1)30(2)	
2000	700	0.22	24.0	15.0	41.5	37.5	700	2,800,000	154	20	5.1	12.73	24	75UW3220(1)L3(2)	R75UW3220(1)L3(2)	
2000	700	0.27	16.0	28.5	41.5	37.5	700	2,800,000	189	20	10.0	9.41	23	75UW3270(1)30(2)	R75UW3270(1)30(2)	
2000	700	0.27	24.0	19.0	41.5	37.5	700	2,800,000	189	20	10.0	9.34	23	75UW3270(1)L3(2)	R75UW3270(1)L3(2)	
2000	700	0.33	16.0	28.5	41.5	37.5	700	2,800,000	231	20	8.2	10.40	23	75UW3330(1)30(2)	R75UW3330(1)30(2)	
2000	700	0.33	24.0	19.0	41.5	37.5	700	2,800,000	231	20	8.2	10.33	23	75UW3330(1)L3(2)	R75UW3330(1)L3(2)	
2000	700	0.39	19.0	32.0	41.5	37.5	700	2,800,000	273	20	8.2	10.89	21	75UW3390(1)30(2)	R75UW3390(1)30(2)	
2000	700	0.47	19.0	32.0	41.5	37.5	700	2,800,000	329	20	6.8	11.95	21	75UW3470(1)30(2)	R75UW3470(1)30(2)	
2000	700	0.56	20.0	40.0	41.5	37.5	700	2,800,000	392	20	5.7	13.70	19	75UW3560(1)40(2)	R75UW3560(1)40(2)	
2000	700	0.68	20.0	40.0	41.5	37.5	700	2,800,000	476	20	4.7	15.09	19	75UW3680(1)30(2)	R75UW3680(1)30(2)	
2000	700	0.82	24.0	44.0	41.5	37.5	700	2,800,000	574	20	3.9	17.29	17	75UW3820(1)40(2)	R75UW3820(1)40(2)	
2000	700	1	24.0	44.0	41.5	37.5	700	2,800,000	700	20	3.2	19.10	17	75UW4100(1)30(2)	R75UW4100(1)30(2)	
VDC	VAC	Cap Value	T	H	L	Lead Spacing (S)	dV/dt (V/µs)	Max K ₀ (V ² /µs)	A _{pk}	nH	mΩ	A _{rms}	(°C/W)	KEMET Internal Part Number	Customer Part Number	
									Lead Length 2x 4 mm	at 100 kHz	at 100 kHz, 85°C					
VDC	VAC	Cap Value	Dimensions			Lead Spacing (S)	dV/dt (V/µs)	Max K ₀ (V ² /µs)	I _{pk}	ESL	ESR max	I _{rms} max (*)	R _{th}	KEMET Internal Part Number	Customer Part Number	
			A _{pk}	ESL	ESR max				I _{rms} max (*)	R _{th}						

(1) Insert lead and packaging code. See Ordering Options Table for available options.
(2) J = 5%, K = 10%, M = 20%
(3) K = 10%, M = 20%
(4) H = 2.5%, J = 5%, K = 10%
(*) I_{rms} value that leads to a ΔT of ≈ 20°C on the box surface > T_{BOX} = T_{AMB} + ΔT = 85°C + 20°C = 105°C

Soldering Process

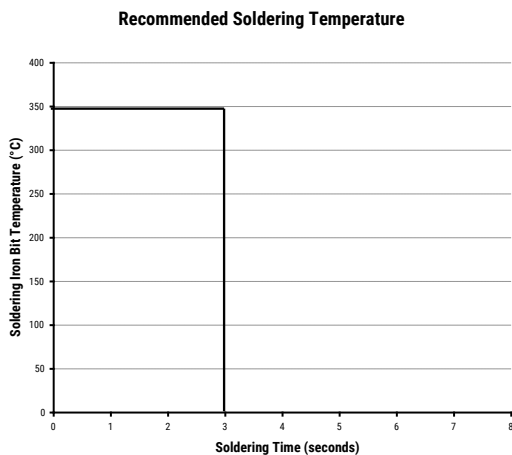
The implementation of the RoHS directive has resulted in the selection of SnAgCu (SAC) alloys or SnCu alloys as a primary solder. This has increased the liquidus temperature from that of 183°C for SnPb eutectic alloy to 217 – 221°C for the new alloys. As a result, the heat stress to the components, even in wave soldering, has increased considerably due to higher pre-heat and wave temperatures. Polypropylene capacitors are especially sensitive to heat (the melting point of polypropylene is 160 – 170°C). Wave soldering can be destructive, especially for mechanically small polypropylene capacitors (with lead spacing of 5 mm to 15 mm), and great care has to be taken during soldering. The recommended solder profiles from KEMET should be used. Please consult KEMET with any questions. In general, the wave soldering curve from IEC Publication 61760–1 Edition 2 serves as a solid guideline for successful soldering. Please see Figure 1.

Reflow soldering is not recommended for through-hole film capacitors. Exposing capacitors to a soldering profile in excess of the above recommended limits may result in degradation or permanent damage to the capacitors.

Do not place the polypropylene capacitor through an adhesive curing oven to cure resin for surface mount components. Insert through-hole parts after the curing of surface mount parts. Consult KEMET to discuss the actual temperature profile in the oven, if through-hole components must pass through the adhesive curing process. A maximum two soldering cycles is recommended. Please allow time for the capacitor surface temperature to return to a normal temperature before the second soldering cycle.

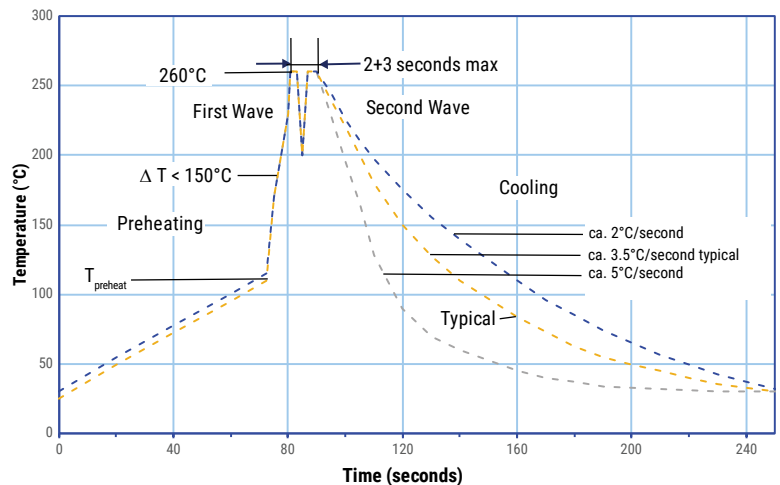
Manual Soldering Recommendations

The following is recommended for manual soldering with a soldering iron.



The soldering iron tip temperature should be set at 350°C (+10°C maximum) with the soldering duration not to exceed more than 3 seconds.

Wave Soldering Recommendations



Soldering Process cont.

Wave Soldering Recommendations cont.

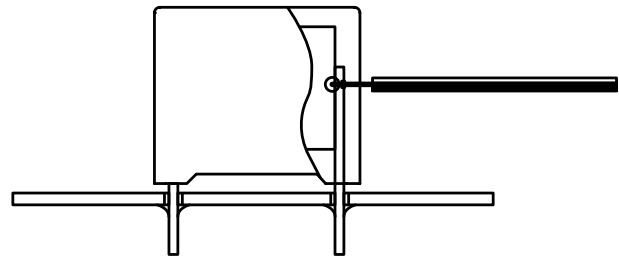
1. The table indicates the maximum set-up temperature of the soldering process
 Figure 1.

Dielectric Film Material	Maximum Preheat Temperature		Maximum Peak Soldering Temperature	
	Capacitor Pitch ≤ 15 mm	Capacitor Pitch > 15 mm	Capacitor Pitch ≤ 15 mm	Capacitor Pitch > 15 mm
Polyester	130°C	130°C	270°C	270°C
Polypropylene	110°C	130°C	260°C	270°C
Paper	130°C	140°C	270°C	270°C
Polyphenylene Sulphide	150°C	160°C	270°C	270°C

2. The maximum temperature measured inside the capacitor:

Set the temperature so that inside the element the maximum temperature is below the limit:

Dielectric Film Material	Maximum temperature measured inside the element
Polyester	160°C
Polypropylene	110°C
Paper	160°C
Polyphenylene Sulphide	160°C



Temperature monitored inside the capacitor.

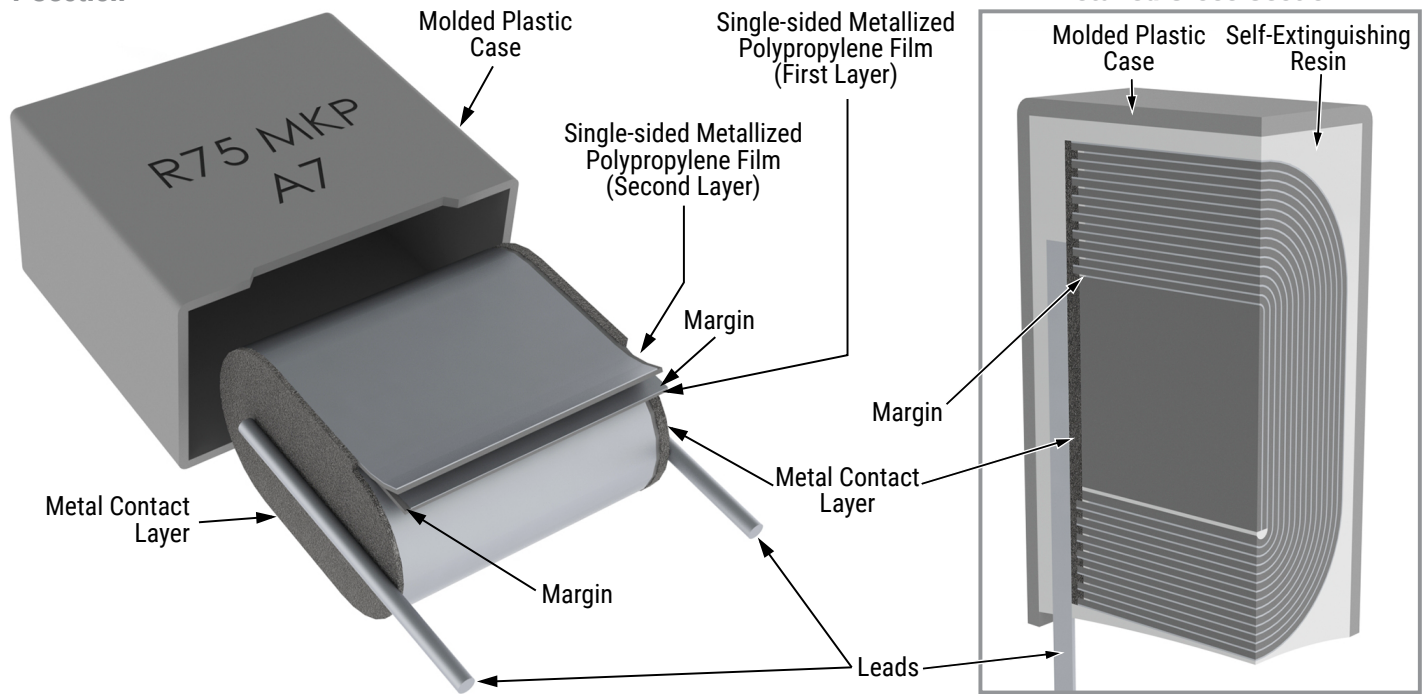
Selective Soldering Recommendations

Selective dip soldering is a variation of reflow soldering. In this method, the printed circuit board with through-hole components to be soldered is preheated and transported over the solder bath as in normal flow soldering without touching the solder. When the board is over the bath, it is stopped and pre-designed solder pots are lifted from the bath with molten solder only at the places of the selected components, and pressed against the lower surface of the board to solder the components.

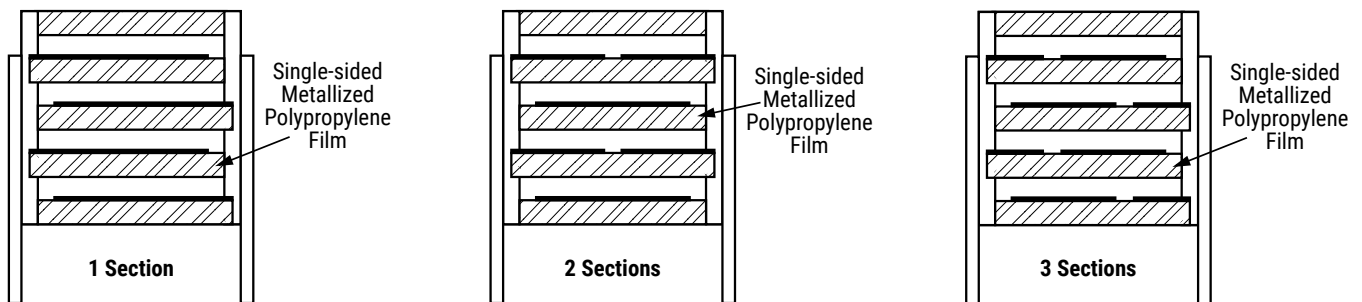
The temperature profile for selective soldering is similar to the double wave flow soldering outlined in this document, **however, instead of two baths, there is only one bath with a time from 3 to 10 seconds.** In selective soldering, the risk of overheating is greater than in double wave flow soldering. Great care must be taken so that the parts are not overheated.

Construction

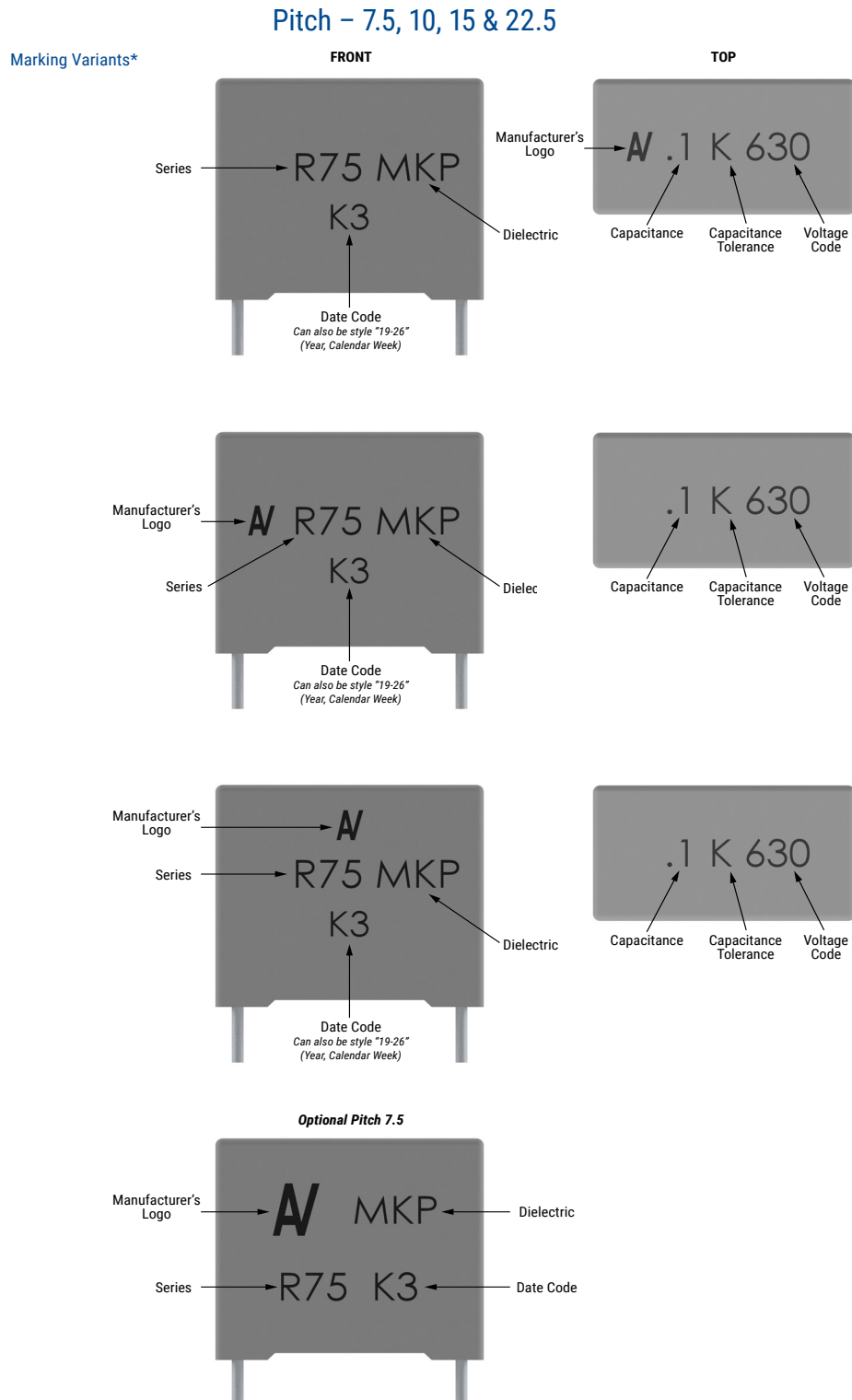
1 Section



Winding Scheme



Marking



* Differences are caused by technology (clichee, laser or ink jet) and technic (production line)

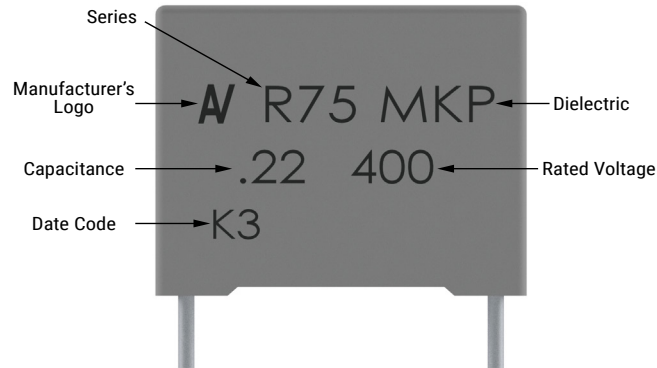
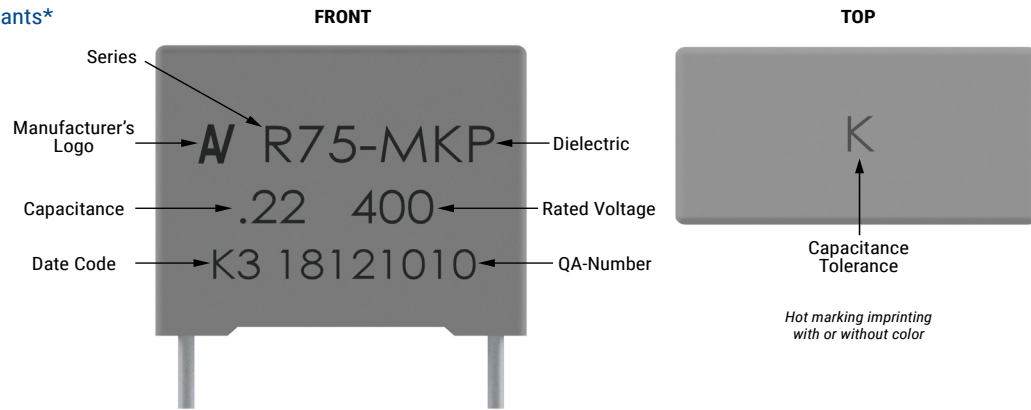
Slight change in the layout can be possible but this does not affect the content of the information of the current marking.

This change will be achieved without impact to product form, fit or function, as the products are equivalent with respect to physical, mechanical, quality and reliability characteristics.

Marking cont.

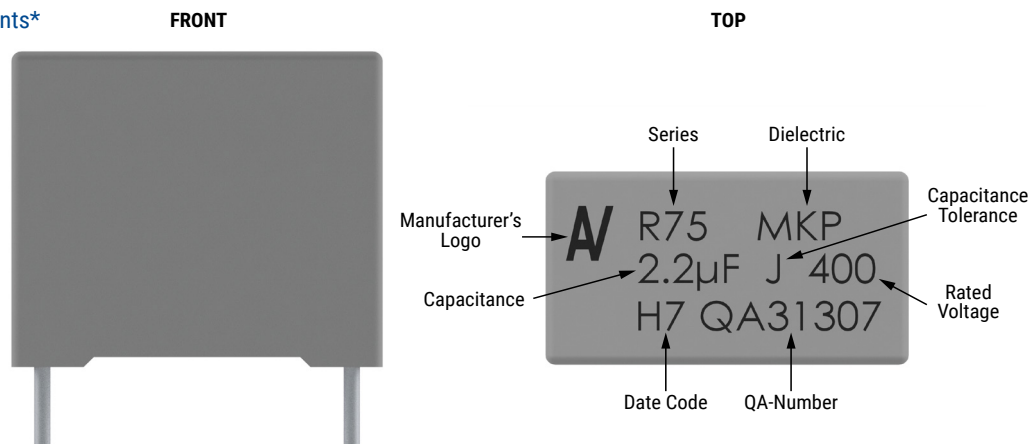
Pitch – 7.5, 10, 15, 22.5, 27.5 & 37.5

Marking Variants*



Pitch – 22.5, 27.5 & 37.5

Marking Variants*

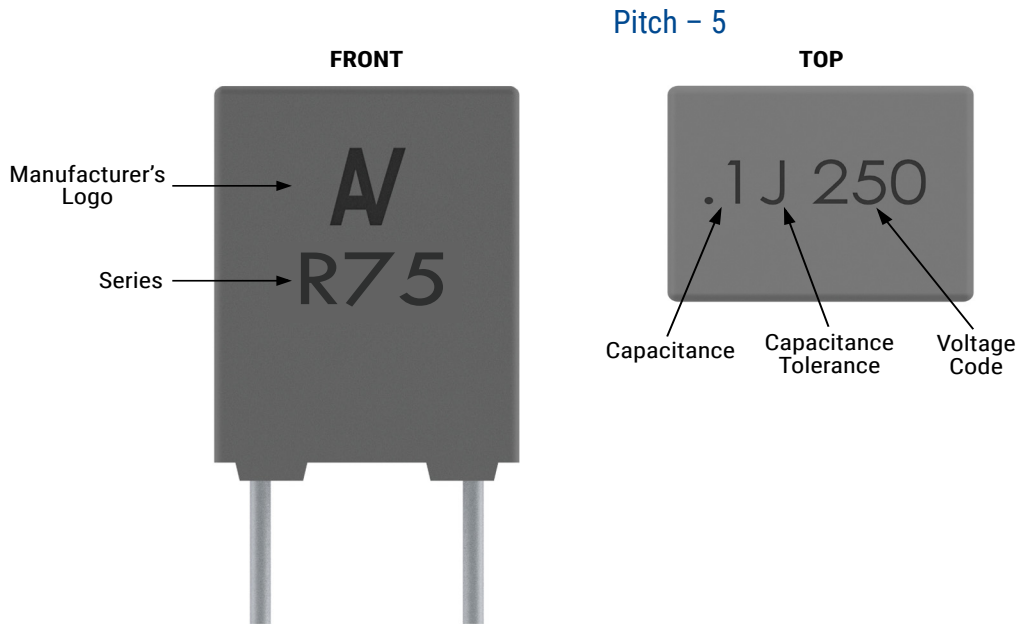


* Differences are caused by technology (clichee, laser or ink jet) and technic (production line)

Slight change in the layout can be possible but this does not affect the content of the information of the current marking.

This change will be achieved without impact to product form, fit or function, as the products are equivalent with respect to physical, mechanical, quality and reliability characteristics.

Marking cont.



* Differences are caused by technology (clichee, laser or ink jet) and technic (production line)

Slight change in the layout can be possible but this does not affect the content of the information of the current marking.

This change will be achieved without impact to product form, fit or function, as the products are equivalent with respect to physical, mechanical, quality and reliability characteristics.

Manufacturing Date Code (IEC-60062)			
Year	Code	Month	Code
2010	A	January	1
2011	B	February	2
2012	C	March	3
2013	D	April	4
2014	E	May	5
2015	F	June	6
2016	H	July	7
2017	J	August	8
2018	K	September	9
2019	L	October	0
2020	M	November	N
2021	N	December	D
2022	P		
2023	R		
2024	S		
2025	T		
2026	U		
2027	V		
2028	W		
2029	X		
2030	A		

Packaging Quantities

Lead Spacing	Thickness (mm)	Height (mm)	Length (mm)	Bulk Short Leads	Bulk Long Leads		Standard Reel ø 355 mm	Large Reel ø 500 mm	Ammo Taped
	Lead and Packaging Code			AA - JA - JB JE - JH	Z3 ¹ - JM ²	40 - 50	GY - CK ¹	CK	DQ
5	3.5	7.5	7.2	2,000	3,000	-	1,800	-	2,500
	4.5	9.5	7.2	1,500	2,000	-	1,400	-	1,900
	5.0	10.0	7.2	1,000	1,500	-	1,200	-	1,700
	6.0	11.0	7.2	2,000	1,000	-	1,000	-	1,400
	7.2	13.0	7.2	1,500	750	-	800	-	1,150
7.5	3.0	8.0	10.0	1,500	1,750	-	2,100	-	2,800
	4.0	9.0	10.0	2,000	1,500	-	1,500	-	2,100
	5.0	10.5	10.0	1,500	1,000	-	1,200	-	1,600
	6.0	12.0	10.5	1,000	800	-	1,000	-	1,350
10	4.0	9.0	13.0	2,000	2,200	1,800	750	1,500	1,000
	5.0	11.0	13.0	1,300	2,000	1,500	600	1,250	800
	6.0	12.0	13.0	1,000	1,800	1,200	500	1,000	680
15	4.0	10.0	18.0	2,500	1,500	1,500	750	1,500	1,000
	5.0	11.0	18.0	2,000	1,250	1,000	600	1,250	800
	6.0	12.0	18.0	1,750	1,000	900	500	1,000	680
	7.5	13.5	18.0	1,000	800	700	350	800	500
	8.5	14.5	18.0	1,000	650	500	300	700	440
	9.0	12.5	18.0	1,000	700	520	270	650	410
	10.0	16.0	18.0	750	550	500	270	600	380
	11.0	19.0	18.0	450	400	350	270	500	340
22.5	6.0	15.0	26.5	805	450	500	300	700	464
	7.0	16.0	26.5	700	450	500	250	550	380
	8.5	17.0	26.5	468	350	300	250	450	280
	10.0	18.5	26.5	396	350	300	160	350	235
	11.0	20.0	26.5	360	200	250	160	350	217
	13.0	22.0	26.5	300	150	200	130	300	-
	14.5	29.5	26.5	264	120	-	-	-	-
27.5	9.0	17.0	32.0	816	-	408	230	450	-
	11.0	20.0	32.0	560	-	336	190	350	-
	13.0	12.0	32.0	672	-	288	-	-	-
	13.0	22.0	32.0	480	-	288	150	300	-
	13.0	25.0	32.0	480	-	288	-	-	-
	14.0	28.0	32.0	352	-	176	-	-	-
	18.0	33.0	32.0	256	-	128	-	-	-
	22.0	37.0	32.0	168	-	112	-	-	-
37.5	11.0	22.0	41.5	420	-	252	-	-	-
	13.0	24.0	41.5	360	-	216	-	-	-
	16.0	28.5	41.5	216	-	108	-	-	-
	19.0	32.0	41.5	192	-	96	-	-	-
	20.0	40.0	41.5	126	-	84	-	-	-
	24.0	15.0	41.5	252	-	108	-	-	-
	24.0	19.0	41.5	216	-	108	-	-	-
	24.0	44.0	41.5	108	-	72	-	-	-
30.0	45.0	41.5	90	-	60	-	-	-	

1 Only 7.5 mm lead spacing: CK.
2 Only for > 7.5 mm lead spacing.

Lead Taping & Packaging (IEC 60286-2)

Figure 1 – Lead Spacing 5 & 7.5 mm

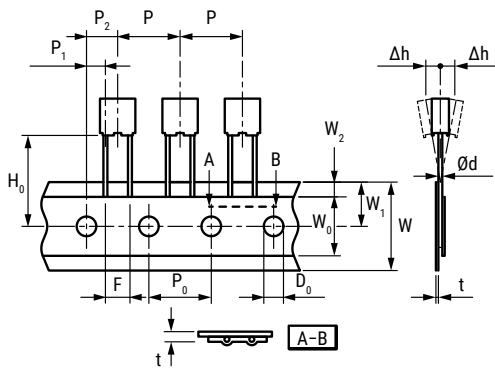


Figure 2 – Lead Spacing 10 & 15 mm

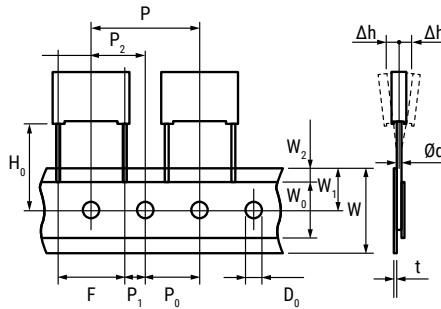
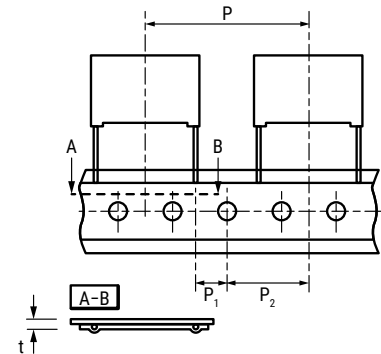


Figure 3 – Lead Spacing 22.5 & 27.5 mm



Taping Specification

Description	Symbol	Dimensions (mm)						Tolerance
		Lead Spacing						
		5.0 Figure 1	7.5 Figure 1	10.0 Figure 2	15.0 Figure 2	22.5 Figure 3	27.5 Figure 3	
Lead wire diameter	d	0.5	0.5 – 0.6	0.6	0.6 – 0.8	0.8	0.8	±0.05
Taping lead space	P	12.7	12.7	25.4	25.4	38.1	38.1	±1
Feed hole lead space *	P ₀	12.7	12.7	12.7	12.7	12.7	12.7	±0.2 **
Centering of the lead wire	P ₁	3.85	2.6	7.7	5.2	7.8	5.3	±0.7
Centering of the body	P ₂	6.35	6.35	12.7	12.7	19.05	19.05	±1.3
Lead spacing ***	F	5.0	7.5	10.0	15.0	22.5	27.5	+0.6/-0.1
Component alignment	Δh	0	0	0	0	0	0	±2
Component deviation	Δp	0	0	0	0	0	0	±1
Height of component from tape center	H ₀ ****	18.5	18.5	18.5	18.5	18.5	18.5	±0.5
Carrier tape width	W	18	18	18	18	18	18	+1/-0.5
Hold down tape width	W ₀	6	6	9	10	10	10	Minimum
Hole position	W ₁	9	9	9	9	9	9	±0.5
Hold down tape position	W ₂	3	3	3	3	3	3	Maximum
Feed hole diameter	D ₀	4	4	4	4	4	4	±0.2
Total tape thickness	t	0.7	0.7	0.7	0.7	0.7	0.7	±0.2

* Available also 15 mm.

** Maximum 1 mm on 20 lead spacing.

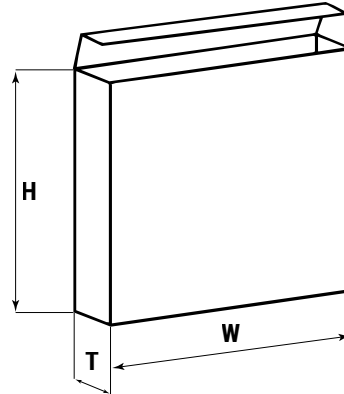
*** 15 mm and 10 mm taped to 7.5 mm (crimped leads) available upon request.

**** H₀ = 16.5 mm is available upon request.

Lead Taping & Packaging (IEC 60286-2) cont.

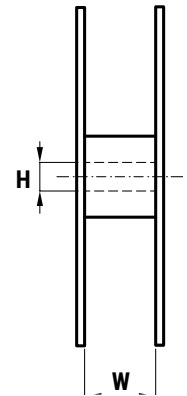
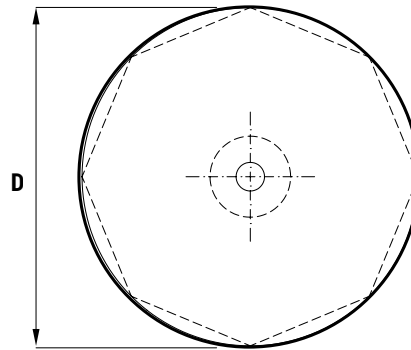
Ammo Specifications

Dimensions (mm)		
H	W	T
360	340	59



Reel Specifications

Dimensions (mm)		
D	H	W
355	30	55 Maximum
500	25	



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