

# CD11GES series

- Endurance: +130°C 3,000 hours +105°C 12,000 hours
- Withstand high temperature 130°C, miniaturized and long life
- Suitable for output circuit and input circuit of LED driving power, electronic ballast and electronic energy saving lamp.
- RoHS Compliant

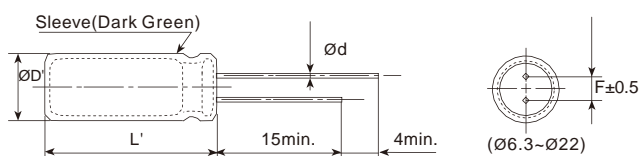
Miniaturized



## SPECIFICATIONS

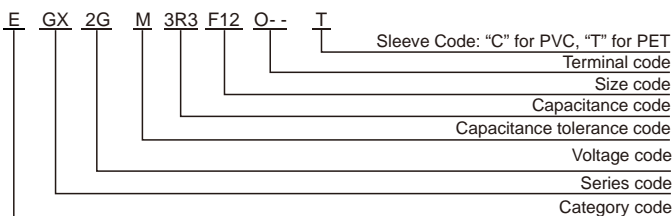
Items	Characteristics							
Category Temperature Range	-40~+130°C(160~ 450 V <sub>dc</sub> )				-40~+105°C(500 V <sub>dc</sub> )			
Rated Voltage Range	160~500 V <sub>dc</sub>							
Capacitance Tolerance	±20%(M) (at 20°C,120Hz)							
Leakage Current	160~400 V <sub>dc</sub>	450~500 V <sub>dc</sub>			Where, I: Max.leakage current (μA),C:Nominal capacitance (μF), V: Rated voltage (V)			
	I 0.02CV+10μA	I 0.03CV+10μA			(at 20°C after 2 minutes)			
Dissipation Factor (tan )	Rated Voltage(V <sub>dc</sub> )	160	200	250	350	400	450	500
	tan (max.)	0.15	0.15	0.15	0.20	0.20	0.20	0.24
Low Temperature Characteristics (Max. Impedance Ratio)	Rated Voltage(V <sub>dc</sub> )	160	200	250	350	400	450	500
	Z(-25°C)/Z(+20°C)	3	3	3	5	5	6	6
	Z(-40°C)/Z(+20°C)	6	6	6	6	6	9	15
Endurance	The specifications listed below shall be met when the capacitors are restored to 20°C after DC voltage is applied for 3,000 hours (VV:160~450V) at 130°C or after DC voltage with the rated ripple current is applied for 12,000 hours at 105°C (500V: 10,000 hours), the peak voltage shall not exceed the rated voltage.							
	Capacitance Change	±20% of the initial value						
	D.F. (tan )	200% of the initial specified value						
	Leakage Current	The initial specified value						
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after leaving them under no load at 105°C for 1,000 hours.							
	Capacitance Change	±20% of the initial value						
	D.F. (tan )	200% of the initial specified value						
	Leakage Current	200% of the initial specified value						

## DIMENSIONS[mm]



ØD	6.3	8	10	12.5	16	18	22
Ød	0.5	0.5	0.6	0.6	0.6	0.8	0.8
F	2.5	3.5	5.0	5.0	7.5	7.5	10
ØD'	ØD+0.5max.						
L'	L+2max.						

## PART NUMBERING SYSTEM



## RATED RIPPLE CURRENT MULTIPLIERS

Frequency correction factor for ripple current

Cap.(μF)	Freq.(Hz)			
	120	1k	10k	100k
Cap.<33	0.40	0.70	0.90	1.00
Cap. 33	0.50	0.80	0.90	1.00

Radial Type

# CD11GES series

■ STANDARD RATINGS (Rated ripple current:mArms/105°C 100kHz)

WV (Vdc)	Cap (μF)	Size DxL(mm)	Rated ripple current	Part Number
160(2C)	1	6.3x9	40	EGX2CM010E09OT
	1.5	6.3x9	45	EGX2CM1R5E09OT
	1.8	6.3x9	50	EGX2CM1R8E09OT
	2.2	6.3x9	56	EGX2CM2R2E09OT
	2.8	6.3x9	70	EGX2CM2R8E09OT
	3.3	6.3x9	85	EGX2CM3R3E09OT
	4.7	6.3x12	96	EGX2CM4R7E12OT
	5.6	6.3x12	102	EGX2CM5R6E12OT
		8x9	102	EGX2CM5R6F09OT
	6.8	6.3x12	109	EGX2CM6R8E12OT
		8x9	109	EGX2CM6R8F09OT
	8.2	8x9	160	EGX2CM8R2F09OT
		8x12	172	EGX2CM8R2F12OT
	10	8x9	220	EGX2CM100F09OT
		8x12	255	EGX2CM100F12OT
	15	8x9	280	EGX2CM150F09OT
		8x12	300	EGX2CM150F12OT
	22	8x12	400	EGX2CM220F12OT
		10x12	440	EGX2CM220G12OT
	33	10x16	580	EGX2CM330G16OT
47	10x16	680	EGX2CM470G16OT	
68	12.5x20	1180	EGX2CM680W20OT	
100	12.5x20	1350	EGX2CM101W20OT	
150	16x20	1790	EGX2CM151L20OT	
220	16x25	2130	EGX2CM221L25OT	
200(2D)	1	6.3x9	55	EGX2DM010E09OT
	1.5	6.3x9	62	EGX2DM1R5E09OT
	1.8	6.3x9	66	EGX2DM1R8E09OT
	2.2	6.3x9	72	EGX2DM2R2E09OT
		6.3x12	81	EGX2DM2R2E12OT
	2.8	6.3x9	84	EGX2DM2R8E09OT
		6.3x12	95	EGX2DM2R8E12OT
	3.3	6.3x12	112	EGX2DM3R3E12OT
	4.7	8x9	144	EGX2DM4R7F09OT
		8x12	160	EGX2DM4R7F12OT
	5.6	8x9	170	EGX2DM5R6F09OT
		8x12	190	EGX2DM5R6F12OT
	6.8	8x9	190	EGX2DM6R8F09OT
		8x12	200	EGX2DM6R8F12OT
	8.2	8x12	279	EGX2DM8R2F12OT
	10	8x12	260	EGX2DM100F12OT
	15	10x12	330	EGX2DM150G12OT
	22	10x16	500	EGX2DM220G16OT
	33	10x20	650	EGX2DM330G20OT
	47	12.5x20	980	EGX2DM470W20OT
68	12.5x25	1300	EGX2DM680W25OT	
	16x20	1300	EGX2DM680L20OT	
82	16x20	1380	EGX2DM820L20OT	
100	16x20	1420	EGX2DM101L20OT	
	16x25	1494	EGX2DM101L25OT	
150	16x25	1890	EGX2DM151L25OT	
	16x30	1989	EGX2DM151L30OT	

WV (Vdc)	Cap (μF)	Size DxL(mm)	Rated ripple current	Part Number
250(2E)	1	6.3x9	55	EGX2EM010E09OT
	1.5	6.3x9	62	EGX2EM1R5E09OT
	1.8	6.3x9	66	EGX2EM1R8E09OT
	2.2	6.3x9	74	EGX2EM2R2E09OT
		6.3x12	81	EGX2EM2R2E12OT
	2.8	6.3x12	95	EGX2EM2R8E12OT
		6.3x12	112	EGX2EM3R3E12OT
	4.7	6.3x12	142	EGX2EM4R7E12OT
		8x12	160	EGX2EM4R7F12OT
	5.6	8x12	190	EGX2EM5R6F12OT
		8x12	200	EGX2EM6R8F12OT
	8.2	8x12	240	EGX2EM8R2F12OT
		8x12	295	EGX2EM100F12OT
	10	8x16	305	EGX2EM100F16OT
		15	8x16	400
	22		10x12	360
		33	10x16	500
	47		10x20	550
		56	12.5x16	760
	68		12.5x20	800
82		12.5x20	980	EGX2EM470W20OT
	100	12.5x25	1080	EGX2EM560W25OT
150		16x20	1270	EGX2EM680L20OT
	150	16x25	1368	EGX2EM680L25OT
150		16x25	1500	EGX2EM820L25OT
	150	12.5x30	1500	EGX2EM820W30OT
150		16x25	1580	EGX2EM101L25OT
	150	18x25	1800	EGX2EM151M25OT
350(2V)		1	6.3x9	56
	1.5	6.3x12	64	EGX2VM010E12OT
		8x9	71	EGX2VM1R5F09OT
	1.8	8x12	75	EGX2VM1R5F12OT
		8x9	80	EGX2VM1R8F09OT
	2.2	8x12	85	EGX2VM1R8F12OT
		8x9	90	EGX2VM2R2F09OT
	2.8	8x12	95	EGX2VM2R2F12OT
		8x9	95	EGX2VM2R8F09OT
	3.3	8x12	100	EGX2VM2R8F12OT
		8x9	110	EGX2VM3R3F09OT
	4.7	8x12	118	EGX2VM3R3F12OT
		8x12	150	EGX2VM4R7F12OT
	5.6	8x16	170	EGX2VM4R7F16OT
		8x12	180	EGX2VM5R6F12OT
	6.8	8x16	200	EGX2VM5R6F16OT
		8x16	225	EGX2VM6R8F16OT
	8.2	10x12	225	EGX2VM6R8G12OT
		10x16	288	EGX2VM8R2G16OT
	10	8x20	320	EGX2VM100F20OT
10x16		330	EGX2VM100G16OT	
15	10x20	450	EGX2VM150G20OT	
	22	12.5x20	650	EGX2VM220W20OT
33		12.5x20	855	EGX2VM330W20OT
	47	16x20	900	EGX2VM330L20OT
68		16x20	1080	EGX2VM470L20OT
	82	18x20	1368	EGX2VM680M20OT
100		18x25	1470	EGX2VM680M25OT
	100	18x25	1530	EGX2VM820M25OT
100		18x30	1700	EGX2VM101M30OT

# CD11GES series

■ STANDARD RATINGS (Rated ripple current:mArms/105°C 100kHz)

WV (Vdc)	Cap (µF)	Size DxL(mm)	Rated ripple current	Part Number
400(2G)	1	6.3x9	60	EGX2GM010E09OT
		6.3x12	65	EGX2GM010E12OT
	1.5	6.3x12	82	EGX2GM1R5E12OT
		8x9	82	EGX2GM1R5F09OT
	1.8	8x9	90	EGX2GM1R8F09OT
		8x12	95	EGX2GM1R8F12OT
	2.2	8x9	95	EGX2GM2R2F09OT
		8x12	100	EGX2GM2R2F12OT
	2.8	8x9	117	EGX2GM2R8F09OT
		8x12	130	EGX2GM2R8F12OT
	3.3	8x9	131	EGX2GM3R3F09OT
		8x12	140	EGX2GM3R3F12OT
	4.7	8x12	160	EGX2GM4R7F12OT
		10x12	170	EGX2GM4R7G12OT
	5.6	8x12	190	EGX2GM5R6F12OT
		10x12	202	EGX2GM5R6G12OT
	6.8	8x16	240	EGX2GM6R8F16OT
		10x16	265	EGX2GM6R8G16OT
	8.2	10x16	288	EGX2GM8R2G16OT
		10x16	310	EGX2GM100G16OT
	10	10x20	350	EGX2GM100G20OT
		15	12.5x20	550
	22	12.5x20	680	EGX2GM220W20OT
		12.5x25	760	EGX2GM220W25OT
		16x20	760	EGX2GM220L20OT
	33	16x20	900	EGX2GM330L20OT
		16x25	1125	EGX2GM330L25OT
	47	16x25	1140	EGX2GM470L25OT
		16x30	1180	EGX2GM470L30OT
	56	18x25	1476	EGX2GM560M25OT
68	18x30	1547	EGX2GM680M30OT	
100	18x35	1610	EGX2GM101M35OT	

WV (Vdc)	Cap (µF)	Size DxL(mm)	Rated ripple current	Part Number
450(2W)	1	6.3x12	80	EGX2WM010E12OT
	1.5	8x12	88	EGX2WM1R5F12OT
	1.8	8x12	90	EGX2WM1R8F12OT
	2.2	8x12	93	EGX2WM2R2F12OT
	2.8	8x16	119	EGX2WM2R8F16OT
	3.3	8x16	128	EGX2WM3R3F16OT
	4.7	10x16	180	EGX2WM4R7G16OT
	5.6	10x16	227	EGX2WM5R6G16OT
		10x20	250	EGX2WM5R6G20OT
	6.8	10x16	250	EGX2WM6R8G16OT
		10x20	265	EGX2WM6R8G20OT
	8.2	10x20	280	EGX2WM8R2G20OT
	10	10x20	300	EGX2WM100G20OT
	15	12.5x20	450	EGX2WM150W20OT
	22	12.5x25	600	EGX2WM220W25OT
	33	16x20	730	EGX2WM220L20OT
		16x25	980	EGX2WM330L25OT
	47	16x35	1080	EGX2WM470L35OT
		18x25	1200	EGX2WM470M25OT
	56	18x30	1429	EGX2WM560M30OT
68	18x35	1500	EGX2WM680M35OT	
100	18x45	1666	EGX2WM101M45OT	
500(2H)	10	12.5x20	320	EGX2HM100W20OT
		12.5x25	336	EGX2HM100W25OT
	15	12.5x25	440	EGX2HM150W25OT
		16x20	440	EGX2HM150L20OT
	22	12.5x35	560	EGX2HM220W35OT
		16x25	560	EGX2HM220L25OT
	33	18x25	700	EGX2HM330M25OT
	47	18x30	880	EGX2HM470M30OT
	68	22x35	1100	EGX2HM680O35OT
	82	22x35	1255	EGX2HM820O35OT
100	22x35	1500	EGX2HM101O35OT	