

# RK series

- Endurance: +105°C 2,000 hours
- Especially designed for charger
- Miniaturized, high voltage
- RoHS Compliant

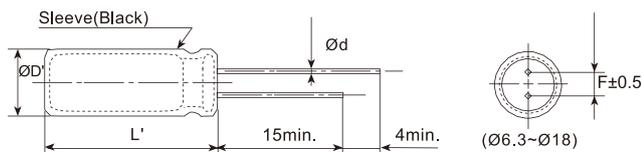
Upgrade



**SPECIFICATIONS**

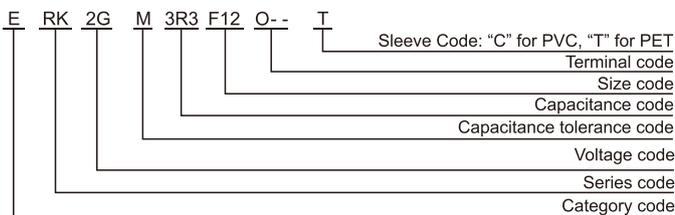
Items	Characteristics				
Category Temperature Range	-40~+105°C(400 V <sub>dc</sub> )		-25~+105°C(450~550 V <sub>dc</sub> )		
Rated Voltage Range	400~550 V <sub>dc</sub>				
Capacitance Tolerance	±20%(M) (at 20°C, 120Hz)				
Leakage Current	400~450 V <sub>dc</sub>	500~550 V <sub>dc</sub>		Where, I:Max.leakage 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 (tanδ)	Rated Voltage(V <sub>dc</sub> )	400	450	500	550
	tanδ (max.)	0.15	0.20	0.24	0.24
Low Temperature Characteristics (Max. Impedance Ratio)	Rated Voltage(V <sub>dc</sub> )	400	450	500	550
	Z(-25°C)/Z(+20°C)	3	5	6	15
	Z(-40°C)/Z(+20°C)	6	-	-	-
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after DC voltage plus the rated ripple current is applied for 2,000 hours at 105°C.				
	Rated voltage(V <sub>dc</sub> )	400~500 V <sub>dc</sub>		550 V <sub>dc</sub>	
	Capacitance Change	≤±20% of the initial value		≤±30% of the initial value	
	D.F. (tanδ)	≤200% of the initial specified value		≤300% of the initial specified value	
	Leakage Current	≤The initial specified value		≤The initial specified value	
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 105°C without voltage applied.				
	Capacitance Change	≤±20% of the initial value			
	D.F. (tanδ)	≤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
Ød	0.5	0.5	0.6	0.6	0.8	0.8
F	2.5	3.5	5.0	5.0	7.5	7.5
ØD'	ØD+0.5max.					
L'	L+2max.					

**PART NUMBERING SYSTEM**



**RATED RIPPLE CURRENT MULTIPLIERS**

Frequency correction factor for ripple current

Freq.(Hz)	120	1k	10k	100k
WV(V <sub>dc</sub> )	0.50	0.80	0.90	1.00

The endurance of capacitors is shortened with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise. When long life performance is required in actual use, the rms ripple current has to be reduced.

Radial Type

**RK series**

■ STANDARD RATINGS

WV (Vdc)	Cap (μF)	Size DxL(mm)	tanδ	Rated ripple current (mA <sub>rms</sub> /105°C, 100kHz)	Part Number
400(2G)	2.2	6.3×9	0.15	64	ERK2GM2R2E09OT
		8×7	0.15	66	ERK2GM2R2F07OT
	3.3	6.3×11	0.15	74	ERK2GM3R3E11OT
		8×9	0.15	76	ERK2GM3R3F09OT
		8×11	0.15	80	ERK2GM3R3F11OT
	4.7	6.3×11	0.15	90	ERK2GM4R7E11OT
		8×9	0.15	94	ERK2GM4R7F09OT
		8×11	0.15	98	ERK2GM4R7F11OT
	6.8	8×11	0.15	126	ERK2GM6R8F11OT
		10×9	0.15	132	ERK2GM6R8G09OT
	8.2	8×11	0.15	145	ERK2GM8R2F11OT
		10×9	0.15	150	ERK2GM8R2G09OT
		10×10	0.15	158	ERK2GM8R2G10OT
	10	8×12	0.15	165	ERK2GM100F12OT
		8×14	0.15	180	ERK2GM100F14OT
		10×9	0.15	172	ERK2GM100G09OT
	15	10×12	0.15	210	ERK2GM150G12OT
		10×14	0.15	230	ERK2GM150G14OT
	22	10×16	0.15	250	ERK2GM220G16OT
		12.5×16	0.15	300	ERK2GM220W16OT
	33	12.5×16	0.15	520	ERK2GM330W16OT
		12.5×22	0.15	650	ERK2GM470W22OT
	47	16×16	0.15	670	ERK2GM470L16OT
		13×25	0.15	780	ERK2GM560K25OT
	68	16×23	0.15	880	ERK2GM680L23OT
		18×18	0.15	880	ERK2GM680M18OT
		18×20	0.15	920	ERK2GM680M20OT
	450(2W)	2.2	6.3×11	0.20	65
8×9			0.20	72	ERK2WM2R2F09OT
3.3		8×9	0.20	82	ERK2WM3R3F09OT
		8×11	0.20	100	ERK2WM4R7F11OT
4.7		10×9	0.20	110	ERK2WM4R7G09OT
		10×9	0.20	130	ERK2WM6R8G09OT
6.8		10×10	0.20	148	ERK2WM6R8G10OT
		10×10	0.20	190	ERK2WM8R2G10OT
8.2	10×12	0.20	210	ERK2WM8R2G12OT	

WV (Vdc)	Cap (μF)	Size DxL(mm)	tanδ	Rated ripple current (mA <sub>rms</sub> /105°C, 100kHz)	Part Number	
450(2W)	10	8×16	0.20	220	ERK2WM100F16OT	
		10×12	0.20	230	ERK2WM100G12OT	
		10×14	0.20	250	ERK2WM100G14OT	
	15	10×16	0.20	230	ERK2WM150G16OT	
		12.5×16	0.20	250	ERK2WM150W16OT	
	22	12.5×20	0.20	295	ERK2WM220W20OT	
		16×16	0.20	320	ERK2WM220L16OT	
	33	12.5×22	0.20	495	ERK2WM330W22OT	
		16×16	0.20	495	ERK2WM330L16OT	
		16×20	0.20	550	ERK2WM330L20OT	
	47	16×20	0.20	640	ERK2WM470L20OT	
		16×25	0.20	710	ERK2WM470L25OT	
	68	18×20	0.20	870	ERK2WM680M20OT	
		18×25	0.20	970	ERK2WM680M25OT	
	500(2H)	3.3	8×12	0.24	85	ERK2HM3R3F12OT
			8×12	0.24	110	ERK2HM4R7F12OT
4.7		10×9	0.24	110	ERK2HM4R7G09OT	
		10×9	0.24	130	ERK2HM5R6G09OT	
6.8		10×10	0.24	150	ERK2HM6R8G10OT	
		8.2	10×12	0.24	190	ERK2HM8R2G12OT
10		10×16	0.24	225	ERK2HM100G16OT	
		12	10×16	0.24	230	ERK2HM120G16OT
15	10×18	0.24	250	ERK2HM150G18OT		
	22	12.5×20	0.24	280	ERK2HM220W20OT	
550(2J)	3.3	8×12	0.24	85	ERK2JM3R3F12OT	
		10×10	0.24	110	ERK2JM4R7G10OT	
	4.7	10×12	0.24	120	ERK2JM4R7G12OT	
		10×12	0.24	130	ERK2JM5R6G12OT	
	6.8	10×12	0.24	150	ERK2JM6R8G12OT	
		8.2	10×14	0.24	190	ERK2JM8R2G14OT
	10	10×16	0.24	225	ERK2JM100G16OT	
		12	10×20	0.24	235	ERK2JM120G20OT
15	12.5×20	0.24	250	ERK2JM150W20OT		
	22	12.5×25	0.24	280	ERK2JM220W25OT	