

RK series

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

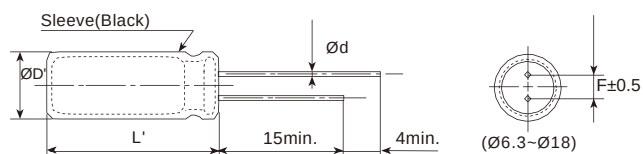
Upgrade



SPECIFICATIONS

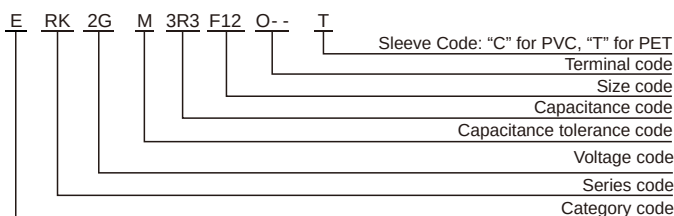
Items	Characteristics					
Category Temperature Range	-40~+105°C(400 V _{dc})		-25~+105°C(450~550 V _{dc})			
Rated Voltage Range	400~550 V _{dc}					
Capacitance Tolerance	±20%(M) (at 20°C,120Hz)					
Leakage Current	400~450 V _{dc}	500~550 V _{dc}		Where, I:Max.leakage current (μA),C:Nominal capacitance (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 _{dc})	400	450	500	550	(at 20°C,120Hz)
	tanδ (max.)	0.15	0.20	0.24	0.24	
Low Temperature Characteristics (Max. Impedance Ratio)	Rated Voltage(V _{dc})	400	450	500	550	(at 120Hz)
	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 _{dc})	400~500 V _{dc}			550 V _{dc}	
	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 _{dc})				
400~550	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.

RK series

■ STANDARD RATINGS

WV (Vdc)	Cap (μF)	Size ΦD×L(mm)	tanδ	Rated ripple current (mA _{rms} /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
	47	12.5×22	0.15	650	ERK2GM470W22OT
		16×16	0.15	670	ERK2GM470L16OT
	56	13×25	0.15	780	ERK2GM560K25OT
		16×23	0.15	880	ERK2GM680L23OT
		18×18	0.15	880	ERK2GM680M18OT
	68	18×20	0.15	920	ERK2GM680M20OT
450(2W)	2.2	6.3×11	0.20	65	ERK2WM2R2E11OT
		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	10×10	0.20	190	ERK2WM8R2G10OT
		10×12	0.20	210	ERK2WM8R2G12OT

WV (Vdc)	Cap (μF)	Size ΦD×L(mm)	tanδ	Rated ripple current (mA _{rms} /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
		12.5×20	0.20	295	ERK2WM220W20OT
	22	16×16	0.20	320	ERK2WM220L16OT
		12.5×22	0.20	495	ERK2WM330W22OT
		16×16	0.20	495	ERK2WM330L16OT
	33	16×20	0.20	550	ERK2WM330L20OT
		16×20	0.20	640	ERK2WM470L20OT
		16×25	0.20	710	ERK2WM470L25OT
	47	18×20	0.20	870	ERK2WM680M20OT
		18×25	0.20	970	ERK2WM680M25OT
500(2H)	3.3	8×12	0.24	85	ERK2HM3R3F12OT
	4.7	8×12	0.24	110	ERK2HM4R7F12OT
		10×9	0.24	110	ERK2HM4R7G09OT
	5.6	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
	4.7	10×10	0.24	110	ERK2JM4R7G10OT
		10×12	0.24	120	ERK2JM4R7G12OT
	5.6	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