

# RK series

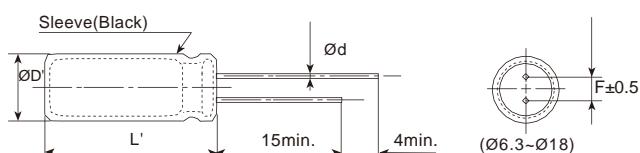
- Endurance: +105°C 2,000 hours
- Especially designed for charger
- Miniaturized,high voltage
- RoHS Compliant


 Upgrade


## SPECIFICATIONS

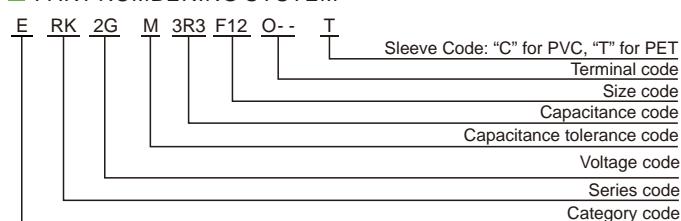
Items	Characteristics									
Category Temperature Range	-40~+105°C(400 Vdc) -25~+105°C(450~550 Vdc)									
Rated Voltage Range	400~550 Vdc									
Capacitance Tolerance	$\pm 20\%$ (M) (at 20°C, 120Hz)									
Leakage Current	400~450 Vdc	500~550 Vdc	Where, I:Max.leakage current ( $\mu$ A),C:Nominal capacitance ( $\mu$ F), V: Rated voltage (V) (at 20°C after 2 minutes)							
	I 0.02CV+10 $\mu$ A	I 0.03CV+10 $\mu$ A								
Dissipation Factor (tan $\delta$ )	Rated Voltage(Vdc)	400	450	500	550	(at 20°C, 120Hz)				
	tan $\delta$ (max.)	0.15	0.20	0.24	0.24					
Low Temperature Characteristics (Max. Impedance Ratio)	Rated Voltage(Vdc)	400	450	500	550	(at 120Hz)				
	Z(-25°C)/Z(+20°C)	3	5	6	15					
	Z(-40°C)/Z(+20°C)	6	-	-	-					
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.										
Endurance	Rated voltage(Vdc)	400~500 Vdc		550 Vdc						
	Capacitance Change	$\pm 20\%$ of the initial value		$\pm 30\%$ of the initial value						
	D.F. (tan $\delta$ )	200% of the initial specified value		300% of the initial specified value						
	Leakage Current	The initial specified value		The initial specified value						
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.										
Shelf Life	Capacitance Change	$\pm 20\%$ of the initial value								
	D.F. (tan $\delta$ )	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'	$\text{ØD}+0.5\text{max.}$					
L'	L+2max.					

## PART NUMBERING SYSTEM



Radial Type

## RATED RIPPLE CURRENT MULTIPLIERS

Frequency correction factor for ripple current

Freq.(Hz)	120	1k	10k	100k
WV(Vdc)	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

<b>WV (V<sub>dc</sub>)</b>	<b>Cap (<math>\mu</math>F)</b>	<b>Size DxL(mm)</b>	<b>tan</b>	<b>Rated ripple current (mA<sub>rms</sub>/105°C, 100kHz)</b>	<b>Part Number</b>
400(2G)	2.2	6.3x9	0.15	64	ERK2GM2R2E09OT
		8x7	0.15	66	ERK2GM2R2F07OT
	3.3	6.3x11	0.15	74	ERK2GM3R3E11OT
		8x9	0.15	76	ERK2GM3R3F09OT
	4.7	8x11	0.15	80	ERK2GM3R3F11OT
		6.3x11	0.15	90	ERK2GM4R7E11OT
	6.8	8x9	0.15	94	ERK2GM4R7F09OT
		8x11	0.15	98	ERK2GM4R7F11OT
	8.2	8x11	0.15	126	ERK2GM6R8F11OT
		10x9	0.15	132	ERK2GM6R8G09OT
	10	8x11	0.15	145	ERK2GM8R2F11OT
		10x9	0.15	150	ERK2GM8R2G09OT
	15	10x10	0.15	158	ERK2GM8R2G10OT
		8x12	0.15	165	ERK2GM100F12OT
	22	8x14	0.15	180	ERK2GM100F14OT
		10x9	0.15	172	ERK2GM100G09OT
	33	10x12	0.15	210	ERK2GM150G12OT
		10x14	0.15	230	ERK2GM150G14OT
	47	10x16	0.15	250	ERK2GM220G16OT
		12.5x16	0.15	300	ERK2GM220W16OT
	56	12.5x16	0.15	520	ERK2GM330W16OT
		12.5x22	0.15	650	ERK2GM470W22OT
	68	16x16	0.15	670	ERK2GM470L16OT
		13x25	0.15	780	ERK2GM560K25OT
	8.2	16x23	0.15	880	ERK2GM680L23OT
		18x18	0.15	880	ERK2GM680M18OT
		18x20	0.15	920	ERK2GM680M20OT
450(2W)	2.2	6.3x11	0.20	65	ERK2WM2R2E11OT
		8x9	0.20	72	ERK2WM2R2F09OT
	3.3	8x9	0.20	82	ERK2WM3R3F09OT
		8x11	0.20	100	ERK2WM4R7F11OT
	4.7	10x9	0.20	110	ERK2WM4R7G09OT
		10x9	0.20	130	ERK2WM6R8G09OT
	6.8	10x10	0.20	148	ERK2WM6R8G10OT
		10x10	0.20	190	ERK2WM8R2G10OT
	8.2	10x12	0.20	210	ERK2WM8R2G12OT

<b>WV (V<sub>dc</sub>)</b>	<b>Cap (<math>\mu</math>F)</b>	<b>Size DxL(mm)</b>	<b>tan</b>	<b>Rated ripple current (mA<sub>rms</sub>/105°C, 100kHz)</b>	<b>Part Number</b>
450(2W)	10	8x16	0.20	220	ERK2WM100F16OT
		10x12	0.20	230	ERK2WM100G12OT
	15	10x14	0.20	250	ERK2WM100G14OT
		10x16	0.20	230	ERK2WM150G16OT
	22	12.5x16	0.20	250	ERK2WM150W16OT
		12.5x20	0.20	295	ERK2WM220W20OT
	33	16x16	0.20	320	ERK2WM220L16OT
		12.5x22	0.20	495	ERK2WM330W22OT
	47	16x16	0.20	495	ERK2WM330L16OT
		16x20	0.20	550	ERK2WM330L20OT
	68	16x20	0.20	640	ERK2WM470L20OT
		16x25	0.20	710	ERK2WM470L25OT
	8.2	18x20	0.20	870	ERK2WM680M20OT
		18x25	0.20	970	ERK2WM680M25OT
	3.3	8x12	0.24	85	ERK2HM3R3F12OT
		8x12	0.24	110	ERK2HM4R7F12OT
	4.7	10x9	0.24	110	ERK2HM4R7G09OT
		5.6	10x9	0.24	130
	6.8	10x10	0.24	150	ERK2HM6R8G10OT
		8.2	10x12	0.24	190
	10	10x16	0.24	225	ERK2HM100G16OT
		12	10x16	0.24	230
	15	10x18	0.24	250	ERK2HM150G18OT
		12.5x20	0.24	280	ERK2HM220W20OT
	3.3	8x12	0.24	85	ERK2JM3R3F12OT
		10x10	0.24	110	ERK2JM4R7G10OT
	4.7	10x12	0.24	120	ERK2JM4R7G12OT
		5.6	10x12	0.24	130
	6.8	10x12	0.24	150	ERK2JM6R8G12OT
		8.2	10x14	0.24	190
	10	10x16	0.24	225	ERK2JM100G16OT
		12	10x20	0.24	235
	15	12.5x20	0.24	250	ERK2JM150W20OT
		22	12.5x25	0.24	280