

RM series

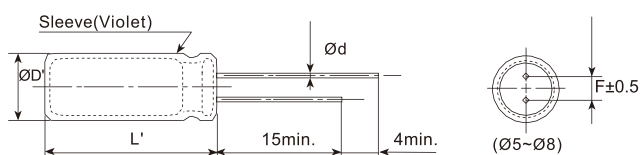
- Endurance: +105°C 10,000 hours
- Miniaturized, long life
- RoHS Compliant



SPECIFICATIONS

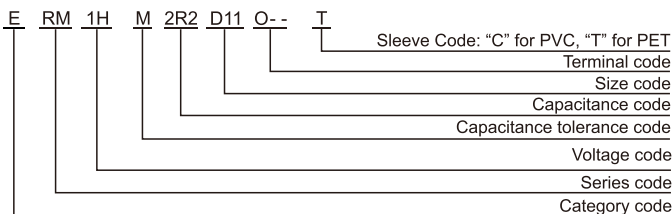
Items	Characteristics								
Category Temperature Range	-40~+105°C								
Rated Voltage Range	10~100 V _{dc}								
Capacitance Tolerance	±20%(M) (at 20°C, 120Hz)								
Leakage Current	I ≤ 0.01CV or 3μA, whichever is greater. Where, I: Max. leakage current (μA), C: Nominal capacitance (μF), V: Rated voltage (V) (at 20°C after 2 minutes)								
Dissipation Factor (tanδ)	Rated Voltage(V _{dc})	10	16	25	35	50	63	100	
	tanδ (max.)	0.45	0.35	0.30	0.22	0.19	0.17	0.15	
When nominal capacitance exceeds 1,000μF, add 0.02 to the value above for each 1,000μF increase. (at 20°C, 120Hz)									
Low Temperature Characteristics (Max. Impedance Ratio)	Rated Voltage(V _{dc})	10	16	25	35	50	63	100	
	Z(-25°C)/Z(+20°C)	8	6	4	3				
	Z(-40°C)/Z(+20°C)	13	10	8	7				
(at 120Hz)									
Endurance	The specifications listed below shall be met when the capacitors are restored to 20°C after DC voltage plus rated ripple current is applied for 10,000 hours at 105°C.								
	Capacitance Change	≤±25% of the initial value							
	D.F. (tanδ)	≤300% 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. (tanδ)	≤200% of the initial specified value							
	Leakage Current	≤200% of the initial specified value							

DIMENSIONS[mm]



ØD	5	6.3	8
Ød	0.5	0.5	0.5
F	2.0	2.5	3.5
ØD'	ØD+0.5max.		
L'	L+1.5max.		

PART NUMBERING SYSTEM



RATED RIPPLE CURRENT MULTIPLIERS

Frequency correction factor for ripple current

Freq.(Hz)	120	1k	10k	100k
Cap.<22	0.42	0.60	0.80	1.00
22≤Cap.<47	0.55	0.75	0.90	1.00
Cap.≥47	0.70	0.85	0.95	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.

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■ STANDARD RATINGS

WV (V _{dc})	Cap (μF)	Size ΦDxL(mm)	tanδ	Rated ripple current (mA _{rms} /105°C,100kHz)	Part Number
10(1A)	100	5×11	0.45	130	ERM1AM101D11OT
	220	6.3×11	0.45	210	ERM1AM221E11OT
	330	8×11	0.45	330	ERM1AM331F11OT
16(1C)	47	5×11	0.35	130	ERM1CM470D11OT
	100	6.3×11	0.35	210	ERM1CM101E11OT
	220	8×11	0.35	330	ERM1CM221F11OT
25(1E)	33	5×11	0.30	130	ERM1EM330D11OT
	47	5×11	0.30	130	ERM1EM470D11OT
	100	6.3×11	0.30	210	ERM1EM101E11OT
35(1V)	33	5×11	0.22	130	ERM1VM330D11OT
	47	6.3×11	0.22	210	ERM1VM470E11OT
	100	8×11	0.22	330	ERM1VM101F11OT
50(1H)	0.47	5×11	0.19	12	ERM1HMR47D11OT
	1	5×11	0.19	25	ERM1HM010D11OT
	2.2	5×11	0.19	35	ERM1HM2R2D11OT
	3.3	5×11	0.19	70	ERM1HM3R3D11OT
	4.7	5×11	0.19	80	ERM1HM4R7D11OT
	10	5×11	0.19	90	ERM1HM100D11OT
	22	5×12	0.19	110	ERM1HM220D12OT
	33	6.3×11	0.19	190	ERM1HM330E11OT
	47	6.3×11	0.19	190	ERM1HM470E11OT
100	8×12	0.19	270	ERM1HM101F12OT	
63(1J)	10	5×11	0.17	80	ERM1JM100D11OT
	22	6.3×11	0.17	170	ERM1JM220E11OT
	33	6.3×12	0.17	170	ERM1JM330E12OT
	47	8×12	0.17	240	ERM1JM470F12OT
100(1K)	0.47	5×11	0.15	20	ERM1KMR47D11OT
	1	5×11	0.15	40	ERM1KM010D11OT
	2.2	5×11	0.15	50	ERM1KM2R2D11OT
	3.3	5×11	0.15	60	ERM1KM3R3D11OT
	4.7	5×11	0.15	70	ERM1KM4R7D11OT
	10	6.3×12	0.15	150	ERM1KM100E12OT
	22	8×12	0.15	230	ERM1KM220F12OT