

RF Series

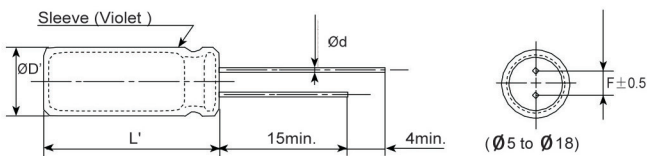
- Extremely low impedance, high ripple current
- Enabled high ripple current by a reduction of impedance at high frequency range
- Lifetime +105°C 3,000 to 6000 hours
- ROHS Compliant



◆ SPECIFICATIONS

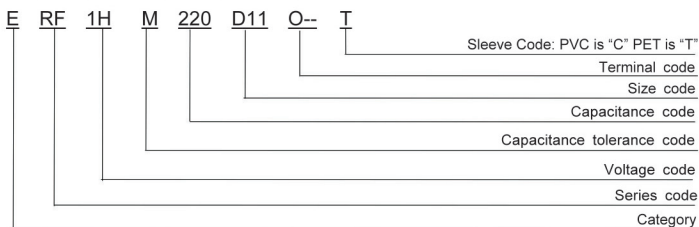
Items	Characteristics																				
Category	-40 to +105°C																				
Temperature Range	-40 to +105°C																				
Rated Voltage Range	6.3 to 100V _{dc}																				
Capacitance Tolerance	±20%(M) (at 20°C, 120Hz)																				
Leakage Current	I ≒ 0.01CV or 3μA whichever is greater Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 2minutes)																				
Dissipation Factor (tan δ)	Rated voltage (V _{dc})	6.3	10	16	25	35	50	63	80	100											
	tan δ (Max.)	0.15	0.14	0.12	0.10	0.10	0.08	0.08	0.08	0.08											
	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})	6.3	10	16	25	35	50	63	80	100											
	Z(-25°C)/Z(+20°C)	5	4	3																	
	Z(-45°C)/Z(+20°C)	10	8	5	4																
Endurance	The following specification shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied for the specified period of time at 105°C																				
	Capacitance change	≤ ±25% of the initial value								<table border="1"> <tr> <th>Case Dia</th> <th>Lifetime (hours)</th> </tr> <tr> <td>∅D ≤ 6.3</td> <td>3,000</td> </tr> <tr> <td>∅D = 8</td> <td>4,000</td> </tr> <tr> <td>∅D = 10</td> <td>5,000</td> </tr> <tr> <td>∅D ≥ 12.5</td> <td>6,000</td> </tr> </table>		Case Dia	Lifetime (hours)	∅D ≤ 6.3	3,000	∅D = 8	4,000	∅D = 10	5,000	∅D ≥ 12.5	6,000
	Case Dia	Lifetime (hours)																			
	∅D ≤ 6.3	3,000																			
	∅D = 8	4,000																			
∅D = 10	5,000																				
∅D ≥ 12.5	6,000																				
D.F. (tan δ)	≤ 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 exposing them for 1000 hours at 105°C without voltage applied.																				
	Capacitance change	≤ ±25% of the initial value																			
	D.F. (tan δ)	≤ 200% of the initial specified value																			
	Leakage current	≤ 200% The initial specified value																			

◆ DIMENSIONS [mm]



∅D	5	6.3	8	10	12.5	16	18
∅d	0.5	0.5	0.5	0.6	0.6	0.6	0.8
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5
∅D'	∅D+0.5max.						
L'	L+2max.						

◆ PART NUMBER SYSTEM



※Sleeve Code and Terminal Code should follow the part number system

◆ RATED RIPPLE CURRENT MULTIPLIERS

Frequency correction factor for ripple current

Cap(μF) \ Freq.(Hz)	120	1k	10k	100k
Cap. < 220	0.40	0.75	0.90	1.00
220 ≤ Cap. < 680	0.50	0.85	0.94	1.00
680 ≤ Cap. < 2200	0.60	0.87	0.95	1.00
2200 ≤ Cap. < 4700	0.75	0.90	0.95	1.00
Cap. ≥ 4700	0.85	0.95	0.98	1.00

The endurance of capacitors is shorted 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.