

RSseries

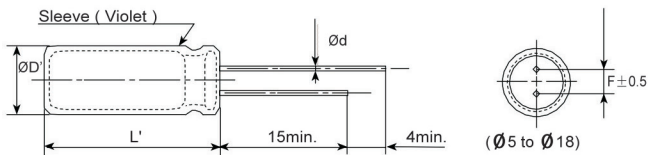
- High performance, high reliability
- Low impedance, high ripple current, long life
- Lifetime +105°C 4,000 to 10,000 hours
- RoHs Compliant



◆ SPECIFICATIONS

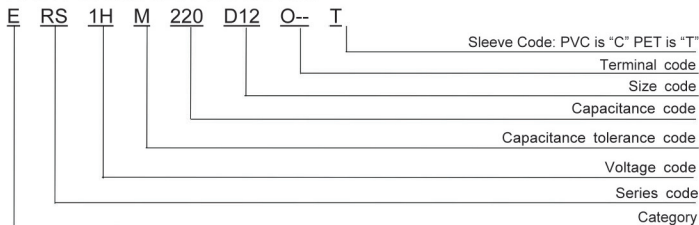
Items	Characteristics																														
Category	-40 to +105°C																														
Temperature Range	-40 to +105°C																														
Rated Voltage Range	6.3 to 100V _{dc}																														
Capacitance Tolerance	±20%(M) (at 20°C, 120Hz)																														
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 2 minutes)																														
Dissipation Factor (tanδ)	Rated voltage (V _{dc})	6.3	10	16	25	35	50	63	80	100																					
	tanδ (Max.)	0.22	0.19	0.16	0.14	0.12	0.10	0.09	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)	4		3		2																									
	Z(-40°C)/Z(+20°C)	8		6		4		3																							
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	≤ ±20% of the initial value (6.3V, 10V: ≤ ±30%)								<table border="1"> <tr> <th colspan="2">Case Dia</th> <th colspan="2">Lifetime (hours)</th> </tr> <tr> <td>6.3-10V</td> <td>16-100V</td> <td>4,000</td> <td>5,000</td> </tr> <tr> <td>∅D ≤ 6.3</td> <td></td> <td>6,000</td> <td>7,000</td> </tr> <tr> <td>∅D = 8 & 10</td> <td></td> <td>8,000</td> <td>10,000</td> </tr> <tr> <td>∅D ≥ 12.5</td> <td></td> <td></td> <td></td> </tr> </table>		Case Dia		Lifetime (hours)		6.3-10V	16-100V	4,000	5,000	∅D ≤ 6.3		6,000	7,000	∅D = 8 & 10		8,000	10,000	∅D ≥ 12.5			
	Case Dia		Lifetime (hours)																												
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∅D ≥ 12.5																															
D.F. (tanδ)	≤ 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	≤ ±20% of the initial value (6.3V, 10V: ≤ ±30%)																													
	D.F. (tanδ)	≤ 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	0.8	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.