

# RZ series

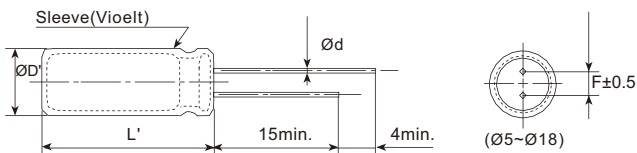
- Miniaturized, long life, low impedance
- High ripple current, high reliability
- Endurance: 6,000~10,000 hours at 105°C
- **RoHS Compliant**



## SPECIFICATIONS

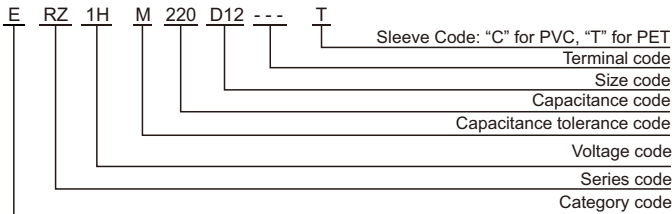
Items	Characteristics														
Category Temperature Range	-40~+105°C														
Rated Working Voltage Range	6.3~50 V <sub>dc</sub>														
Capacitance Tolerance	±20%(M) (at 20°C, 120Hz)														
Leakage Current	I ≤ 0.01CV or 3μA, whichever is greater. Where, I: Max. leakage current (μA), C: Nominal capacitance (μF), V: Rated voltage (V) (at 20°C after 2 minutes)														
Dissipation Factor (tanδ)	<table border="1"> <tr> <td>Rated Voltage(V<sub>dc</sub>)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> </tr> <tr> <td>Dissipation Factor (max.)</td> <td>0.22</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> </tr> </table>	Rated Voltage(V <sub>dc</sub> )	6.3	10	16	25	35	50	Dissipation Factor (max.)	0.22	0.19	0.16	0.14	0.12	0.10
	Rated Voltage(V <sub>dc</sub> )	6.3	10	16	25	35	50								
Dissipation Factor (max.)	0.22	0.19	0.16	0.14	0.12	0.10									
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 <sub>dc</sub> )	6.3	10	16~50											
	Z(-25°C)/Z(+20°C)	3													
	Z(-40°C)/Z(+20°C)	6	4	3											
(at 120Hz)															
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 a specified period of time at 105°C.														
	Capacitance Change	≤±25% of the initial value (6.3~10V <sub>dc</sub> : ≤±30%)		<table border="1"> <tr> <td>Case Dia.(mm)</td> <td>Load life (hours)</td> </tr> <tr> <td>ØD ≤ 6.3</td> <td>6,000</td> </tr> <tr> <td>ØD = 8</td> <td>8,000</td> </tr> <tr> <td>ØD ≥ 10</td> <td>10,000</td> </tr> </table>	Case Dia.(mm)	Load life (hours)	ØD ≤ 6.3	6,000	ØD = 8	8,000	ØD ≥ 10	10,000			
	Case Dia.(mm)	Load life (hours)													
	ØD ≤ 6.3	6,000													
ØD = 8	8,000														
ØD ≥ 10	10,000														
Dissipation Factor	≤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 1,000 hours at 105°C without voltage applied.														
	Capacitance Change	≤±25% of the initial value (6.3~10V <sub>dc</sub> : ≤±30%)													
	Dissipation Factor	≤200% of the initial specified value													
	Leakage Current	≤200% of the initial specified value													

## DIMENSIONS[mm]



ØD	5	6.3	8	10	12.5	16	18
Ød	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
ØD'	ØD+0.5max.						
L'	L+2max.						

## PART NUMBERING SYSTEM



## RATED RIPPLE CURRENT MULTIPLIERS

Frequency correction factor for ripple current

Freq.(Hz) Cap.(μF)	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

RZ series

■ STANDARD RATINGS

WV (V <sub>dc</sub> )	Cap (μF)	Size ΦDxL(mm)	Impedance (Ω <sub>max</sub> /20°C, 100kHz)	Rated ripple current (mA <sub>RMS</sub> /105°C, 100kHz)	Part Number
6.3	220	5×12	0.22	345	ERZ0JM221D12---T
	220	6.3×9	0.30	310	ERZ0JM221E09---T
	470	6.3×12	0.094	540	ERZ0JM471E12---T
	470	8×9	0.120	485	ERZ0JM471F09---T
	820	8×12	0.056	945	ERZ0JM821F12---T
	820	10×9	0.072	850	ERZ0JM821G09---T
	1200	8×16	0.045	1250	ERZ0JM122F16---T
	1200	10×13	0.039	1330	ERZ0JM122G13---T
	1500	8×20	0.029	1500	ERZ0JM152F20---T
	1800	10×16	0.028	1760	ERZ0JM182G16---T
	2200	10×20	0.020	1960	ERZ0JM222G20---T
	2700	10×25	0.018	2250	ERZ0JM272G25---T
	3900	12.5×20	0.017	2480	ERZ0JM392W20---T
	4700	12.5×25	0.015	2900	ERZ0JM472W25---T
	5600	12.5×30	0.013	3450	ERZ0JM562W30---T
	6800	12.5×35	0.012	3570	ERZ0JM682W35---T
	6800	16×20	0.015	3250	ERZ0JM682L20---T
	8200	16×25	0.013	3630	ERZ0JM822L25---T
	10000	18×25	0.012	3650	ERZ0JM103M25---T
	10	150	5×12	0.22	345
150		6.3×9	0.30	310	ERZ1AM151E09---T
330		6.3×12	0.094	540	ERZ1AM331E12---T
330		8×9	0.120	485	ERZ1AM331F09---T
680		8×11	0.056	945	ERZ1AM681F11---T
680		10×9	0.072	850	ERZ1AM681G09---T
1000		8×16	0.045	1250	ERZ1AM102F16---T
1000		10×13	0.039	1330	ERZ1AM102G13---T
1500		8×20	0.029	1500	ERZ1AM152F20---T
1500		10×16	0.028	1760	ERZ1AM152G16---T
1800		10×20	0.020	1960	ERZ1AM182G20---T
2200		10×25	0.018	2250	ERZ1AM222G25---T
3300		12.5×20	0.017	2480	ERZ1AM332W20---T
3900		12.5×25	0.015	2900	ERZ1AM392W25---T
4700		12.5×30	0.013	3450	ERZ1AM472W30---T
4700		16×20	0.015	3250	ERZ1AM472L20---T
5600	12.5×35	0.012	3570	ERZ1AM562W35---T	
6800	16×25	0.013	3630	ERZ1AM682L25---T	
8200	18×25	0.012	3650	ERZ1AM822M25---T	
16	100	5×12	0.22	345	ERZ1CM101D12---T
	100	6.3×9	0.30	310	ERZ1CM101E09---T
	220	6.3×12	0.094	540	ERZ1CM221E12---T
	220	8×9	0.120	485	ERZ1CM221F09---T
	470	8×12	0.056	945	ERZ1CM471F12---T
	470	10×9	0.072	850	ERZ1CM471G09---T
	680	8×16	0.045	1250	ERZ1CM681F16---T
	680	10×13	0.039	1330	ERZ1CM681G13---T
	1000	8×20	0.029	1500	ERZ1CM102F20---T
	1000	10×16	0.028	1760	ERZ1CM102G16---T
	1500	10×20	0.020	1960	ERZ1CM152G20---T
	1800	10×25	0.018	2250	ERZ1CM182G25---T
	2200	12.5×20	0.017	2480	ERZ1CM222W20---T
	2700	12.5×25	0.015	2900	ERZ1CM272W25---T
	3300	12.5×30	0.013	3450	ERZ1CM332W30---T
	3300	16×20	0.015	3250	ERZ1CM332L20---T
	3900	12.5×35	0.012	3570	ERZ1CM392W35---T
	4700	16×25	0.013	3630	ERZ1CM472L25---T
5600	18×25	0.012	3650	ERZ1CM562M25---T	

WV (V <sub>dc</sub> )	Cap (μF)	Size ΦDxL(mm)	Impedance (Ω <sub>max</sub> /20°C, 100kHz)	Rated ripple current (mA <sub>RMS</sub> /105°C, 100kHz)	Part Number
25	68	5×12	0.22	345	ERZ1EM680D12---T
	68	6.3×9	0.30	310	ERZ1EM680E09---T
	150	6.3×12	0.094	540	ERZ1EM151E12---T
	150	8×9	0.120	485	ERZ1EM151F09---T
	330	8×12	0.056	945	ERZ1EM331F12---T
	330	10×9	0.072	850	ERZ1EM331G09---T
	390	8×16	0.045	1250	ERZ1EM391F16---T
	470	10×13	0.039	1330	ERZ1EM471G13---T
	560	8×20	0.029	1500	ERZ1EM561F20---T
	680	10×16	0.028	1760	ERZ1EM681G16---T
	820	10×20	0.020	1960	ERZ1EM821G20---T
	1000	10×25	0.018	2250	ERZ1EM102G25---T
	1500	12.5×20	0.017	2480	ERZ1EM152W20---T
	1800	12.5×25	0.015	2900	ERZ1EM182W25---T
	2200	12.5×30	0.013	3450	ERZ1EM222W30---T
	2200	16×20	0.015	3250	ERZ1EM222L20---T
	2700	12.5×35	0.012	3570	ERZ1EM272W35---T
	3300	16×25	0.013	3630	ERZ1EM332L25---T
	3900	18×25	0.012	3650	ERZ1EM392M25---T
	35	47	5×12	0.22	345
47		6.3×9	0.30	310	ERZ1VM470E09---T
100		6.3×12	0.094	540	ERZ1VM101E12---T
100		8×9	0.120	485	ERZ1VM101F09---T
220		8×16	0.056	945	ERZ1VM221F16---T
270		8×20	0.045	1250	ERZ1VM271F20---T
330		10×13	0.039	1330	ERZ1VM331G13---T
390		8×20	0.029	1500	ERZ1VM391F20---T
470		10×16	0.028	1760	ERZ1VM471G16---T
560		10×20	0.020	1960	ERZ1VM561G20---T
680		10×25	0.018	2250	ERZ1VM681G25---T
1000		12.5×20	0.017	2480	ERZ1VM102W20---T
1200		12.5×25	0.015	2900	ERZ1VM122W25---T
1500		12.5×30	0.013	3450	ERZ1VM152W30---T
1500		16×20	0.015	3250	ERZ1VM152L20---T
1800		12.5×35	0.012	3570	ERZ1VM182W35---T
2200	16×25	0.013	3630	ERZ1VM222L25---T	
2700	18×25	0.012	3650	ERZ1VM272M25---T	
50	22	5×12	0.34	238	ERZ1HM220D12---T
	22	6.3×9	0.44	214	ERZ1HM220E09---T
	56	6.3×12	0.14	385	ERZ1HM560E12---T
	56	8×9	0.18	345	ERZ1HM560F09---T
	100	8×12	0.074	724	ERZ1HM101F12---T
	100	10×9	0.096	650	ERZ1HM101G09---T
	120	8×16	0.061	950	ERZ1HM121F16---T
	150	10×13	0.061	979	ERZ1HM151G13---T
	180	8×20	0.046	1190	ERZ1HM181F20---T
	220	10×16	0.042	1370	ERZ1HM221G16---T
	270	10×20	0.030	1580	ERZ1HM271G20---T
	330	10×25	0.028	1870	ERZ1HM331G25---T
	470	12.5×20	0.027	2050	ERZ1HM471W20---T
	560	12.5×25	0.023	2410	ERZ1HM561W25---T
	680	12.5×30	0.021	2860	ERZ1HM681W30---T
	820	12.5×35	0.019	2960	ERZ1HM821W35---T
	820	16×20	0.023	2730	ERZ1HM821L20---T
	1000	16×25	0.021	3010	ERZ1HM102L25---T
1500	18×25	0.019	3290	ERZ1HM152M25---T	

Radial Type

※ Specifications subject to change without notice.