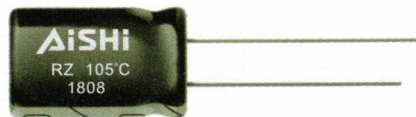


RZ series

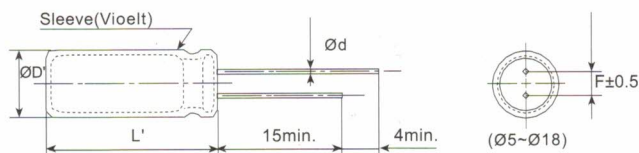
- Miniaturized, long life, low impedance
- High ripple current, high reliability
- Endurance: 6,000~10,000 hours at 105°C
- RoHS Compliant



SPECIFICATIONS

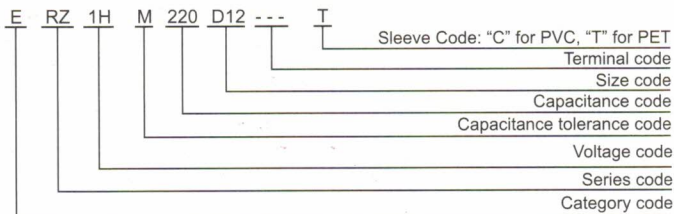
Items	Characteristics						
Category Temperature Range	-40~+105°C						
Rated Working Voltage Range	6.3~50 V _{dc}						
Capacitance Tolerance	±20%(M) (at 20°C,120Hz)						
Leakage Current	I≤0.01CV or 3μA, whichever is greater. Where, I:Max.leakage current (μA),C:Nominal capacitance (μF),V: Rated voltage (V) (at 20°C after 2 minutes)						
Dissipation Factor (tanδ)	Rated Voltage(V _{dc})	6.3	10	16	25	35	50
	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 _{dc})	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 _{dc} :≤±30%)				Case Dia.(mm)	Load life (hours)
	Dissipation Factor	≤200% of the initial specified value				ØD≤6.3	6,000
	Leakage Current	≤The initial specified value				ØD=8	8,000
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 _{dc} :≤±30%)				ØD≥10	10,000
	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	0.6	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)	120	1k	10k	100k
Cap.(μF)				
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 _{dc})	Cap (μF)	Size ΦDxL(mm)	Impedance (Ω _{max} /20°C, 100kHz)	Rated ripple current (mA _{RMS} /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	ERZ1AM151D12---T
	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 _{dc})	Cap (μF)	Size ΦDxL(mm)	Impedance (Ω _{max} /20°C, 100kHz)	Rated ripple current (mA _{RMS} /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	ERZ1VM470D12---T
	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