

RJ series

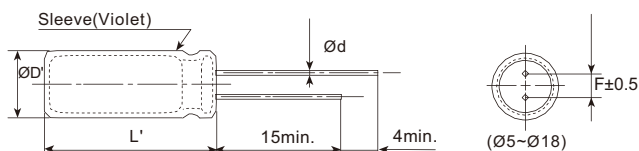
- Miniaturized
- Low impedance, high ripple current, long life
- Endurance: 8,000 ~ 12,000 hours at 105°C
- RoHS Compliant



SPECIFICATIONS

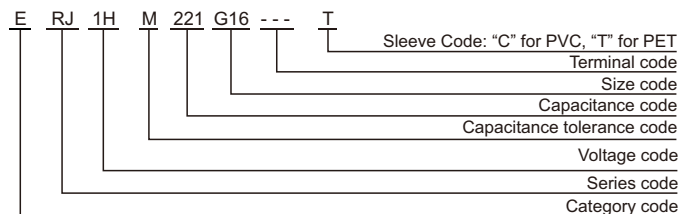
Items	Characteristics									
Category Temperature Range	-40~+105°C									
Rated Voltage Range	10~120 V _{dc}									
Capacitance Tolerance	±20%(M) (at 20°C,120Hz)									
Leakage Current	I≤0.01CV or 3μA, whichever is greater. Where, I:Max.leakage current (μA),C:Nominal capacitance (μF),V: Rated voltage (V) (at 20°C after 2 minutes)									
Dissipation Factor (tanδ)	Rated Voltage(V _{dc})	10	16	25	35	50	63	80	100	120
	Dissipation Factor (Max.)	0.19	0.16	0.14	0.12	0.10	0.09	0.09	0.08	0.12
	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	80	100	120
	Z(-25°C)/Z(+20°C)	2	2							3
	Z(-40°C)/Z(+20°C)	4	3							6 (at 120Hz)
Endurance	The specifications listed below shall be satisfied when the capacitors are restored to 20°C after DC voltage plus rated ripple current is applied for a specified period of time at 105°C.									
	Capacitance Change		≤±25% of the initial value (10V: ≤±30%)					Case Dia.(mm)		Load life (hours)
	Dissipation Factor		≤200% of the initial specified value					ØD≤6.3		8,000
	Leakage Current		≤The initial specified value					ØD=8&10		10,000
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		≤±25% of the initial value (10V: ≤±30%)					ØD≥12.5		12,000
	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
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.<47	0.42	0.70	0.90	1.00
47≤Cap.<330	0.50	0.73	0.92	1.00
330≤Cap.<820	0.55	0.77	0.94	1.00
820≤Cap.<2200	0.60	0.80	0.96	1.00
Cap.≥2200	0.70	0.85	0.98	1.00

RJ 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
10	150	5×12	0.400	450	ERJ1AM151D12---T
	330	6.3×12	0.170	520	ERJ1AM331E12---T
	560	8×12	0.075	1200	ERJ1AM561F12---T
	680	8×16	0.059	1600	ERJ1AM681F16---T
	820	10×13	0.053	1700	ERJ1AM821G13---T
	1000	8×20	0.041	1960	ERJ1AM102F20---T
	1200	10×16	0.038	2000	ERJ1AM122G16---T
	1800	10×20	0.036	2300	ERJ1AM182G20---T
	2200	10×25	0.024	2900	ERJ1AM222G25---T
	2700	12.5×20	0.025	2600	ERJ1AM272W20---T
	3300	12.5×25	0.019	3200	ERJ1AM332W25---T
	4700	12.5×30	0.018	3660	ERJ1AM472W30---T
16	4700	16×20	0.021	3330	ERJ1AM472L20---T
	5600	12.5×35	0.016	4120	ERJ1AM562W35---T
	5600	16×25	0.017	3810	ERJ1AM562L25---T
	120	5×11	0.400	450	ERJ1CM121D11---T
	270	6.3×12	0.170	700	ERJ1CM271E12---T
	270	8×9	0.220	590	ERJ1CM271F09---T
	470	8×12	0.075	1200	ERJ1CM471F12---T
	560	8×16	0.059	1600	ERJ1CM561F16---T
	680	10×13	0.053	1700	ERJ1CM681G13---T
	820	8×20	0.041	1960	ERJ1CM821F20---T
	1000	10×16	0.038	2000	ERJ1CM102G16---T
	1500	10×20	0.028	2500	ERJ1CM152G20---T
25	1800	10×25	0.024	2900	ERJ1CM182G25---T
	2200	12.5×20	0.025	2600	ERJ1CM222W20---T
	2700	12.5×25	0.019	3200	ERJ1CM272W25---T
	3300	12.5×30	0.018	3660	ERJ1CM332W30---T
	3300	16×20	0.021	3330	ERJ1CM332L20---T
	3900	12.5×35	0.016	4120	ERJ1CM392W35---T
	4700	16×25	0.017	3810	ERJ1CM472L25---T
	68	5×11	0.400	450	ERJ1EM680D11---T
	100	5×12	0.380	460	ERJ1EM101D12---T
	100	6.3×11	0.220	450	ERJ1EM101E11---T
	150	6.3×11	0.170	700	ERJ1EM151E11---T
	220	6.3×12	0.170	700	ERJ1EM221E12---T
35	330	8×12	0.075	1200	ERJ1EM331F12---T
	330	10×9	0.097	1020	ERJ1EM331G09---T
	390	8×16	0.059	1600	ERJ1EM391F16---T
	470	8×16	0.059	1600	ERJ1EM471F16---T
	470	10×13	0.053	1700	ERJ1EM471G13---T
	560	8×20	0.041	1960	ERJ1EM561F20---T
	680	10×16	0.038	2000	ERJ1EM681G16---T
	1000	10×20	0.028	2500	ERJ1EM102G20---T
	1200	10×25	0.024	2900	ERJ1EM122G25---T
	1500	12.5×20	0.025	2600	ERJ1EM152W20---T
	1800	12.5×25	0.019	3200	ERJ1EM182W25---T
	2200	12.5×30	0.018	3660	ERJ1EM222W30---T
50	2200	16×20	0.021	3330	ERJ1EM222L20---T
	2700	12.5×35	0.016	4120	ERJ1EM272W35---T
	3300	16×25	0.017	3810	ERJ1EM332L25---T
	47	5×11	0.400	450	ERJ1VM470D11---T
	47	6.3×9	0.520	380	ERJ1VM470E09---T
	68	5×12	0.400	460	ERJ1VM680D12---T
	100	6.3×12	0.170	700	ERJ1VM101E12---T
	100	8×9	0.220	590	ERJ1VM101F09---T
	180	8×12	0.075	1200	ERJ1VM181F12---T
	220	8×16	0.059	1600	ERJ1VM221F16---T
	270	10×13	0.053	1700	ERJ1VM271G13---T
	330	8×20	0.041	1960	ERJ1VM331F20---T
80	330	10×13	0.053	1780	ERJ1VM331G13---T
	390	10×16	0.038	2000	ERJ1VM391G16---T
	560	10×20	0.028	2500	ERJ1VM561G20---T
	820	12.5×20	0.035	2600	ERJ1VM821W20---T
	1200	12.5×25	0.019	3200	ERJ1VM122W25---T
	1500	12.5×30	0.018	3660	ERJ1VM152W30---T
	1500	16×20	0.021	3330	ERJ1VM152L20---T
	1800	12.5×35	0.025	3370	ERJ1VM182W35---T
	1800	16×25	0.023	3660	ERJ1VM182L25---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
50	22	5×11	0.420	255	ERJ1HM220D11---T
	47	6.3×11	0.300	320	ERJ1HM470E11---T
	56	6.3×11	0.220	500	ERJ1HM560E11---T
	56	8×9	0.290	425	ERJ1HM560F09---T
	100	8×12	0.120	950	ERJ1HM101F12---T
	100	10×9	0.160	800	ERJ1HM101G09---T
	120	8×16	0.082	1230	ERJ1HM121F16---T
	150	8×12	0.150	800	ERJ1HM151F12---T
	150	10×13	0.073	1280	ERJ1HM151G13---T
	180	8×20	0.058	1580	ERJ1HM181F20---T
	220	10×16	0.053	1650	ERJ1HM221G16---T
	330	10×20	0.038	2060	ERJ1HM331G20---T
63	390	10×25	0.032	2420	ERJ1HM391G25---T
	470	10×20	0.046	2060	ERJ1HM471G20---T
	470	12.5×20	0.032	2300	ERJ1HM471W20---T
	680	12.5×25	0.025	2800	ERJ1HM681W25---T
	820	12.5×30	0.023	3370	ERJ1HM821W30---T
	820	16×20	0.026	3070	ERJ1HM821L20---T
	1000	12.5×35	0.021	3810	ERJ1HM102W35---T
	1000	16×25	0.022	3510	ERJ1HM102L25---T
	10	5×11	1.800	160	ERJ1JM100D11---T
	22	6.3×11	0.690	275	ERJ1JM220E11---T
	47	6.3×12	0.280	420	ERJ1JM470E12---T
	47	8×9	0.360	350	ERJ1JM470F09---T
80	82	8×12	0.180	720	ERJ1JM820F12---T
	82	10×9	0.300	610	ERJ1JM820G09---T
	100	8×12	0.210	720	ERJ1JM101F12---T
	100	8×16	0.130	990	ERJ1JM101F16---T
	120	10×13	0.110	990	ERJ1JM121G13---T
	150	8×20	0.096	1200	ERJ1JM151F20---T
	150	10×13	0.160	1000	ERJ1JM151G13---T
	180	10×16	0.140	1200	ERJ1JM181G16---T
	220	10×20	0.070	1420	ERJ1JM221G20---T
	270	10×20	0.056	1570	ERJ1JM271G20---T
	270	12.5×16	0.072	1570	ERJ1JM271W16---T
	330	10×25	0.046	1990	ERJ1JM331G25---T
100	390	12.5×20	0.041	1990	ERJ1JM391W20---T
	470	12.5×25	0.031	2460	ERJ1JM471W25---T
	560	12.5×30	0.032	2800	ERJ1JM561W30---T
	560	16×20	0.032	2380	ERJ1JM561L20---T
	680	12.5×35	0.024	3040	ERJ1JM681W35---T
	820	16×25	0.025	2890	ERJ1JM821L25---T
	820	18×20	0.030	2580	ERJ1JM821M20---T
	12	5×11	1.200	220	ERJ1BM120D11---T
	27	6.3×11	0.460	267	ERJ1BM270E11---T
	47	8×12	0.290	620	ERJ1BM470F12---T
	47	10×9	0.380	620	ERJ1BM470G09---T
	56	8×16	0.200	780	ERJ1BM560F16---T
125	68	10×13	0.220	780	ERJ1BM680G13---T
	82	8×20	0.160	1040	ERJ1BM820F20---T
	100	10×13	0.200	780	ERJ1BM101G13---T
	100	10×16	0.110	1040	ERJ1BM101G16---T
	150	10×20	0.084	1430	ERJ1BM151G20---T
	150	12.5×16	0.110	1430	ERJ1BM151W16---T
	180	10×25	0.069	1620	ERJ1BM181G25---T
	220	12.5×20	0.062	1750	ERJ1BM221W20---T
	270	12.5×25	0.047	2210	ERJ1BM271W25---T
	330	12.5×30	0.042	2400	ERJ1BM331W30---T
	330	16×20	0.048	1950	ERJ1BM331L20---T
	390	12.5×35	0.036	2600	ERJ1BM391W35---T
160	470	16×25	0.038	2430	ERJ1BM471L25---T
	470	18×20	0.045	2270	ERJ1BM471M20---T
	560	16×30	0.032	2640	ERJ1BM561L30---T
	680	16×35	0.033	2860	ERJ1BM681L35---T
	680	18×25	0.036	2500	ERJ1BM681M25---T
	820	16×40	0.027	3510	ERJ1BM821L40---T
	820	18×30	0.030	2860	ERJ1BM821M30---T
	1000	18×35	0.027	3510	ERJ1BM102M35---T
	1200	18×40	0.026	3860	ERJ1BM122M40---T

Radial Type

RJ series

■ STANDARD RATINGS

WV (V _{dc})	Cap (μF)	Size ΦD×L (mm)	Impedance (Ω _{max} /20°C, 100kHz)	Rated ripple current (mA _{RMS} /105°C, 100kHz)	Part Number
100	18	6.3×11	0.460	370	ERJ1KM180E11---T
	22	8×12	0.320	540	ERJ1KM220F12---T
	33	8×12	0.290	620	ERJ1KM330F12---T
	33	10×9	0.380	520	ERJ1KM330G09---T
	47	8×12	0.290	620	ERJ1KM470F12---T
	47	8×16	0.200	780	ERJ1KM470F16---T
	56	10×13	0.170	780	ERJ1KM560G13---T
	68	8×16	0.200	800	ERJ1KM680F16---T
	82	10×16	0.110	1040	ERJ1KM820G16---T
	100	10×16	0.140	1040	ERJ1KM101G16---T
	100	10×20	0.084	1430	ERJ1KM101G20---T
	120	10×20	0.084	1430	ERJ1KM121G20---T
	150	10×20	0.120	1430	ERJ1KM151G20---T
	150	12.5×20	0.062	1750	ERJ1KM151W20---T
	220	12.5×25	0.047	2210	ERJ1KM221W25---T
	270	12.5×30	0.042	2400	ERJ1KM271W30---T
	270	16×20	0.048	1950	ERJ1KM271L20---T
	330	12.5×35	0.036	2600	ERJ1KM331W35---T
	390	12.5×40	0.032	2860	ERJ1KM391W40---T
	390	16×25	0.038	2430	ERJ1KM391L25---T
	390	18×20	0.045	2270	ERJ1KM391M20---T
	470	16×30	0.032	2640	ERJ1KM471L30---T
	470	18×25	0.036	2500	ERJ1KM471M25---T
	560	16×35	0.045	2560	ERJ1KM561L35---T
	560	18×30	0.030	2860	ERJ1KM561M30---T
	680	16×40	0.027	3510	ERJ1KM681L40---T
	680	18×35	0.027	3510	ERJ1KM681M35---T
	820	18×40	0.026	3860	ERJ1KM821M40---T
120	10	6.3×12	4.600	94	ERJ2BM100E12---T
	15	6.3×12	3.800	145	ERJ2BM150E12---T
	18	8×9	3.500	145	ERJ2BM180F09---T
	22	8×12	3.000	180	ERJ2BM220F12---T
	33	8×16	2.500	320	ERJ2BM330F16---T
	33	10×13	2.500	320	ERJ2BM330G13---T
	47	8×20	2.000	385	ERJ2BM470F20---T
	47	10×16	2.000	400	ERJ2BM470G16---T
	56	10×16	2.500	332	ERJ2BM560G16---T
	68	10×16	2.500	332	ERJ2BM680G16---T
	82	10×20	2.000	350	ERJ2BM820G20---T
	100	10×25	1.300	540	ERJ2BM101G25---T
	120	12.5×20	1.100	750	ERJ2BM121W20---T
	150	12.5×25	0.850	810	ERJ2BM151W25---T
	220	12.5×30	0.650	990	ERJ2BM221W30---T
	220	16×20	0.650	990	ERJ2BM221L20---T
	270	16×25	0.470	1125	ERJ2BM271L25---T
	270	18×20	0.470	1125	ERJ2BM271M20---T
	330	16×30	0.300	1215	ERJ2BM331L30---T
	330	18×25	0.300	1215	ERJ2BM331M25---T
	470	16×40	0.260	1350	ERJ2BM471L40---T
	470	18×30	0.260	1300	ERJ2BM471M30---T

※ Specifications subject to change without notice.