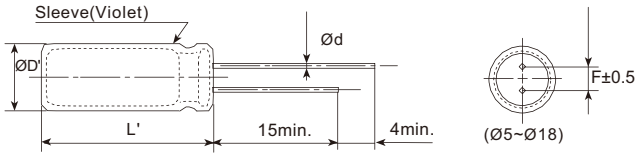
RJ series

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

SPECIFICATIONS

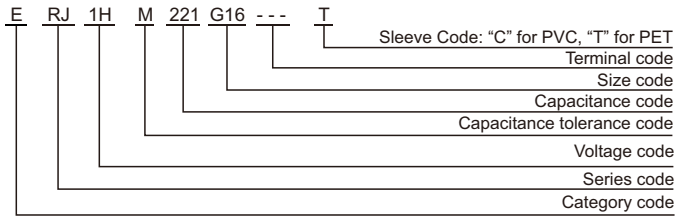
Items	Characteristics
Category Temperature Range	-40~+105°C
Rated Voltage Range	10~120 Vdc
Capacitance Tolerance	±20%(M) (at 20°C,120Hz)
Leakage Current	I≤0.01CV or 3μA, whichever is greater. Where, I:Max.leakage current (μA),C:Nominal capacitance (μF),V: Rated voltage (V) (at 20°C after 2 minutes)
Dissipation Factor (tanδ)	Rated Voltage(Vdc): 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(Vdc): 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%) Dissipation Factor: ≤200% of the initial specified value Leakage Current: ≤The initial specified value Case Dia.(mm) / Load life (hours): ØD≤6.3 — 8,000; ØD=8&10 — 10,000; ØD≥12.5 — 12,000
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%) 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) / Cap.(μF)	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 (Vdc)	Cap (μF)	Size ΦDxL (mm)	Impedance (Ωmax/20°C, 100kHz)	Rated ripple current (mArms/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
	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
16	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
	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
25	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
	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
	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
35	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
	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 (Vdc)	Cap (μF)	Size ΦDxL(mm)	Impedance (Ωmax/20°C, 100kHz)	Rated ripple current (mArms/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
	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
63	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
	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
	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
80	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
	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
	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

RJ series

STANDARD RATINGS

WV (V_{dc})	Cap (μF)	Size ΦDxL (mm)	Impedance (Ωmax/20°C, 100kHz)	Rated ripple current (mArms/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.