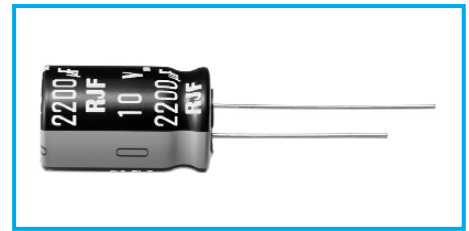
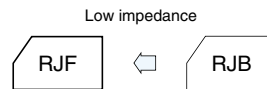


105°C Use, Miniature, High-Reliability, Extra Low Impedance Capacitors Series RJF

- Higher ripple current than RJB Series.
The addition of 5L and 7L.
- Guarantees 5000 hours at 105°C.
(5L, 7L: 1000 hours ; ø 5 to 6.3: 2000 hours ;
ø 8 to 10: 3000 hours)



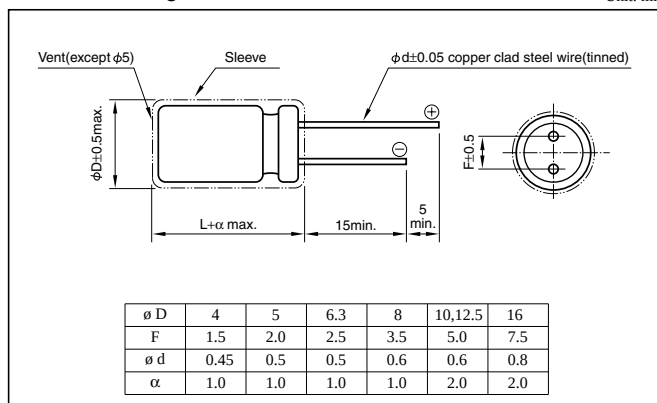
Marking color : White print on a black sleeve

Specifications

Item	Performance																																		
Category temperature range (°C)	-40 to +105																																		
Tolerance at rated capacitance (%)	±20 (20°C,120Hz)																																		
Leakage current (μA)	Less than 0.01CV or 3 whichever is larger (after 2 minutes) C: Rated capacitance(μF); V: Rated voltage(V) (20°C)																																		
Tangent of loss angle (tanδ)	<table><tr><td>Rated voltage (V)</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td></tr><tr><td>tanδ (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)	6.3	10	16	25	35	50	tanδ (max.)	0.22	0.19	0.16	0.14	0.12	0.10														
	Rated voltage (V)	6.3	10	16	25	35	50																												
	tanδ (max.)	0.22	0.19	0.16	0.14	0.12	0.10																												
0.02 is added to every 1000μF increase over 1000μF. (20°C,120Hz)																																			
Characteristics at high and low temperature	<table><tr><td colspan="2">Rated voltage (V)</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td></tr><tr><td rowspan="2">Impedance ratio (max.)</td><td>Z-25°C / Z+20°C</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td></tr><tr><td>Z-40°C / Z+20°C</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td></tr></table>							Rated voltage (V)		6.3	10	16	25	35	50	Impedance ratio (max.)	Z-25°C / Z+20°C	2	2	2	2	2	2	Z-40°C / Z+20°C	3	3	3	3	3	3					
	Rated voltage (V)		6.3	10	16	25	35	50																											
	Impedance ratio (max.)	Z-25°C / Z+20°C	2	2	2	2	2	2																											
Z-40°C / Z+20°C		3	3	3	3	3	3																												
(120Hz)																																			
Endurance (105°C) (Applied ripple current)	<table><tr><td>Test time</td><td colspan="6">5L & 7L : 1000 hours ø 5 & ø 6.3 : 2000 hours ø 8 & ø 10 : 3000 hours ø 12.5 & ø 16 : 5000 hours</td></tr><tr><td>Leakage current</td><td colspan="6">The initial specified value or less</td></tr><tr><td>Percentage of capacitance change</td><td colspan="6">Within ±25% of initial value</td></tr><tr><td>Tangent of the loss angle</td><td colspan="6">200% or less of the initial specified value</td></tr></table>							Test time	5L & 7L : 1000 hours ø 5 & ø 6.3 : 2000 hours ø 8 & ø 10 : 3000 hours ø 12.5 & ø 16 : 5000 hours						Leakage current	The initial specified value or less						Percentage of capacitance change	Within ±25% of initial value						Tangent of the loss angle	200% or less of the initial specified value					
	Test time	5L & 7L : 1000 hours ø 5 & ø 6.3 : 2000 hours ø 8 & ø 10 : 3000 hours ø 12.5 & ø 16 : 5000 hours																																	
	Leakage current	The initial specified value or less																																	
	Percentage of capacitance change	Within ±25% of initial value																																	
Tangent of the loss angle	200% or less of the initial specified value																																		
Shelf life (105°C)	<table><tr><td>Test time</td><td colspan="6">1000 hours</td></tr><tr><td>Leakage current</td><td colspan="6">The initial specified value or less</td></tr><tr><td>Percentage of capacitance change</td><td colspan="6">Within ±25% of initial value</td></tr><tr><td>Tangent of the loss angle</td><td colspan="6">200% or less of the initial specified value</td></tr></table>							Test time	1000 hours						Leakage current	The initial specified value or less						Percentage of capacitance change	Within ±25% of initial value						Tangent of the loss angle	200% or less of the initial specified value					
	Test time	1000 hours																																	
	Leakage current	The initial specified value or less																																	
	Percentage of capacitance change	Within ±25% of initial value																																	
Tangent of the loss angle	200% or less of the initial specified value																																		
Voltage application treatment																																			
Applicable standards	JIS C5101-1, -4 1998 (IEC 60384-1 1992, -4 1985)																																		

Outline Drawing

Unit: mm



Coefficient of Frequency for Rated Ripple Current

Rated capacitance(µF) \ Frequency(Hz)	120	1k	10k	100k
5.6 to 180	0.40	0.75	0.90	1
220 to 390	0.50	0.85	0.95	1
470 to 1800	0.60	0.88	0.96	1
2200 to 3900	0.75	0.90	0.98	1
4700 to 6800	0.85	0.95	1	1

Part numbering system (example: 10V1000µF)

Environmental item	RJF	—	10	V	102	M	H4	#
	Series code		Rated voltage symbol		Rated capacitance symbol	Capacitance tolerance symbol	Casing symbol	
Former item	RJF	—	10	V	102	M	H4	
	Series code		Rated voltage symbol		Rated capacitance symbol	Capacitance tolerance symbol	Casing symbol	

- The electric characteristics are described on page 106.

- The standard ratings are described on the next page.

NOTE

Design, Specifications are subject to change without notice.
Ask factory for technical specifications before purchase and/or use.

Standard Ratings

Rated voltage (V) Rated capacitance (μF)	Item	6.3				10				16						
		Case øD x L (mm)	Casing symbol	Impedance (Ω)		Rated ripple current (mAmps)	Case øD x L (mm)	Casing symbol	Impedance (Ω)		Rated ripple current (mAmps)	Case øD x L (mm)	Casing symbol	Impedance (Ω)		Rated ripple current (mAmps)
				20°C	-10°C				20°C	-10°C				20°C	-10°C	
18	—	—	—	—	—	—	—	—	—	—	4x7	D1	0.85	2.6	130	
27	—	—	—	—	—	4x7	D1	0.85	2.6	130	—	—	—	—	—	
33	—	—	—	—	—	—	—	—	—	—	5x7 6.3x5	E1 F0	0.45 0.30	1.4 0.95	210 210	
39	4x7	D1	0.85	2.6	130	—	—	—	—	—	—	—	—	—	—	
47	—	—	—	—	—	6.3x5	F0	0.29	0.93	210	—	—	—	—	—	
56	—	—	—	—	—	5x7	E1	0.44	1.4	210	5x11.5	E3	0.30	1.0	250	
68	5x7	E1	0.43	1.3	210	—	—	—	—	—	6.3x7	F1	0.24	0.72	300	
100	6.3x5	F0	0.28	0.91	210	5x11.5	E3	0.30	1.0	250	—	—	—	—	—	
120	—	—	—	—	—	6.3x7	F1	0.23	0.69	300	8x7 6.3x11.5	G1 F2	0.15 0.13	0.45 0.41	380 405	
150	5x11.5 6.3x7	E3 F1	0.30 0.23	1.0 0.69	250 300	—	—	—	—	—	—	—	—	—	—	
180	—	—	—	—	—	8x7	G1	0.15	0.45	380	—	—	—	—	—	
220	8x7	G1	0.15	0.45	380	6.3x11.5	F3	0.13	0.41	405	—	—	—	—	—	
330	6.3x11.5	F3	0.13	0.41	405	—	—	—	—	—	8x12	G3	0.072	0.22	760	
470	—	—	—	—	—	8x12	G3	0.072	0.22	760	8x15	G4	0.056	0.17	995	
560	8x12	G3	0.072	0.22	760	—	—	—	—	—	10x16	H4	0.038	0.12	1430	
680	—	—	—	—	—	10x12.5	H3	0.053	0.16	1030	—	—	—	—	—	
820	8x15	G4	0.056	0.17	995	—	—	—	—	—	—	—	—	—	—	
1000	10x12.5	H3	0.053	0.16	1030	10x16	H4	0.038	0.12	1430	10x20	H5	0.023	0.069	1820	
1200	10x16	H4	0.038	0.12	1430	10x20	H5	0.023	0.069	1820	10x25	H6	0.022	0.066	2150	
1500	10x20	H5	0.023	0.069	1820	10x25	H6	0.022	0.066	2150	12.5x20	I 5	0.021	0.053	2360	
2200	10x25	H6	0.022	0.066	2150	12.5x20	I 5	0.021	0.053	2360	12.5x25	I 6	0.018	0.045	2770	
2700	—	—	—	—	—	—	—	—	—	—	16x20	J 5	0.018	0.045	3140	
3300	12.5x20	I 5	0.021	0.053	2360	12.5x25	I 6	0.018	0.045	2770	16x25	J 6	0.016	0.043	3460	
3900	12.5x25	I 6	0.018	0.045	2770	16x20	J 5	0.018	0.045	3140	16x25	J 6	0.016	0.043	3460	
4700	12.5x30	I 7	0.016	0.041	3290	16x25	J 6	0.016	0.043	3460	—	—	—	—	—	
5600	16x20	J 5	0.018	0.045	3140	16x25	J 6	0.016	0.043	3460	—	—	—	—	—	
6800	16x25	J 6	0.016	0.043	3460	—	—	—	—	—	—	—	—	—	—	

Rated voltage (V) Rated capacitance (μF)	Item	25					35					50				
		Case øD x L (mm)	Casing symbol	Impedance (Ω)		Rated ripple current (mAmps)	Case øD x L (mm)	Casing symbol	Impedance (Ω)		Rated ripple current (mAmps)	Case øD x L (mm)	Casing symbol	Impedance (Ω)		Rated ripple current (mAmps)
				20°C	-10°C				20°C	-10°C				20°C	-10°C	
5.6	—	—	—	—	—	—	—	—	—	—	4x7	D1	1.0	3.0	130	
10	—	—	—	—	—	4x7	D1	0.96	2.9	130	5x7	E1	0.50	1.5	210	
15	4x7	D1	0.94	2.9	130	—	—	—	—	—	—	—	—	—	—	
18	—	—	—	—	—	5x7	E1	0.47	1.5	210	—	—	—	—	—	
22	6.3x5	F0	0.31	0.97	210	6.3x5	F0	0.32	1.0	210	6.3x7 5x11.5	F1 E3	0.26 0.34	0.78 1.18	300 238	
27	5x7	E1	0.46	1.4	210	—	—	—	—	—	—	—	—	—	—	
33	—	—	—	—	—	5x11.5	E3	0.30	1.0	250	8x7	G1	0.17	0.51	380	
39	—	—	—	—	—	6.3x7	F1	0.25	0.75	300	—	—	—	—	—	
47	5x11.5	E3	0.30	1.0	250	—	—	—	—	—	—	—	—	—	—	
56	6.3x7	F1	0.24	0.72	300	8x7 6.3x11.5	G1 F3	0.16 0.13	0.48 0.42	380 405	6.3x11.5	F3	0.14	0.50	385	
100	8x7 6.3x11.5	G1 F3	0.15 0.13	0.45 0.41	380 405	—	—	—	—	—	8x12	G3	0.074	0.22	724	
120	—	—	—	—	—	—	—	—	—	—	8x15	G4	0.061	0.18	950	
150	—	—	—	—	—	8x12	G3	0.072	0.22	760	10x12.5	H3	0.061	0.18	979	
180	—	—	—	—	—	—	—	—	—	—	8x20	G5	0.046	0.14	1190	
220	8x12	G3	0.072	0.22	760	10x12.5	H3	0.053	0.16	1030	10x16	H4	0.042	0.12	1370	
270	—	—	—	—	—	8x20	G5	0.041	0.13	1250	10x20	H5	0.030	0.090	1580	
330	10x12.5	H3	0.053	0.16	1030	10x16	H4	0.038	0.12	1430	10x25	H6	0.028	0.085	1870	
470	10x16	H4	0.038	0.12	1430	10x20	H5	0.023	0.069	1820	12.5x20	I 5	0.027	0.068	2050	
560	—	—	—	—	—	10x25	H6	0.022	0.066	2150	12.5x25	I 6	0.023	0.059	2410	
680	10x20	H5	0.023	0.069	1820	12.5x20	I 5	0.021	0.053	2360	16x20	J 5	0.023	0.059	2730	
820	10x25	H6	0.022	0.066	2150	—	—	—	—	—	16x25	J 6	0.021	0.056	3010	
1000	12.5x20	I 5	0.021	0.053	2360	12.5x25	I 6	0.018	0.045	2770	16x25	J 6	0.021	0.056	3010	
1200	—	—	—	—	—	16x20	J 5	0.018	0.045	3140	—	—	—	—	—	
1500	12.5x25	I 6	0.018	0.045	2770	16x25	J 6	0.016	0.043	3460	—	—	—	—	—	
1800	16x20	J 5	0.018	0.045	3140	16x25	J 6	0.016	0.043	3460	—	—	—	—	—	
2200	16x25	J 6	0.016	0.043	3460	—	—	—	—	—	—	—	—	—	—	
2700	16x25	J 6	0.016	0.043	3460	—	—	—	—	—	—	—	—	—	—	

(Note) Impedance : 20°C, 100kHz Rated ripple current : 105°C, 100kHz