

125°C Use, Miniature, Low ESR Capacitors

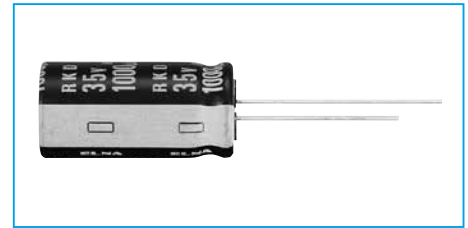
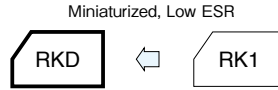
GREEN CAP

Low ESR

125°C 5000hours

Anti-cleaning solvent

- Smaller and low ESR than RK1 series.
- Guarantees 5000 hours at 125°C (2000 hours: $\phi 8$, 3000h: $\phi 10$) (4000 hours: 63V to 100V - $\phi 16 \times 20L$)



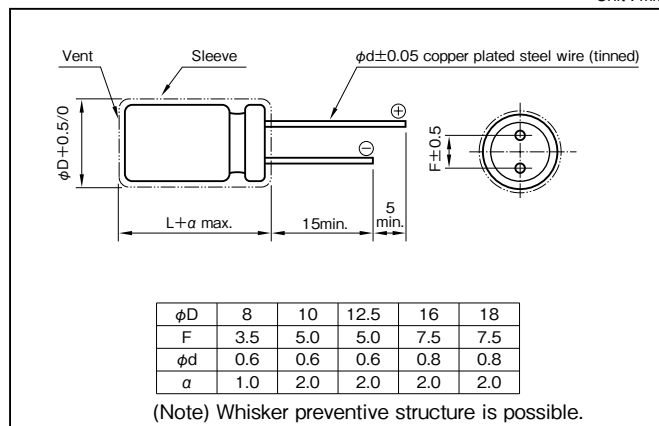
Marking color : White print on a black sleeve

Specifications

Item	Performance																		
Category temperature range (°C)	-40 to +125																		
Tolerance at rated capacitance (%)	±20 (20°C, 120Hz)																		
Leakage current (µA) (max.)	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 border="1"> <thead> <tr> <th>Rated voltage (V)</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>80</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>tanδ (max.)</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.10</td> <td>0.08</td> <td>0.08</td> </tr> </tbody> </table> <p>0.02 is added to every 1000µF increase over 1000µF. (20°C, 120Hz)</p>	Rated voltage (V)	10	16	25	35	50	63	80	100	tanδ (max.)	0.20	0.16	0.14	0.12	0.10	0.10	0.08	0.08
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Characteristics at high and low temperature	<table border="1"> <thead> <tr> <th>Rated voltage (V)</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>80</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>Impedance ratio (max.)</td> <td>Z-40°C/Z+20°C</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> </tbody> </table> <p>(120Hz)</p>	Rated voltage (V)	10	16	25	35	50	63	80	100	Impedance ratio (max.)	Z-40°C/Z+20°C	4	3	3	3	3	3	3
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Endurance (125°C) (Applied ripple current)	<table border="1"> <thead> <tr> <th>Test time</th> <th>5000 hours (2000 hours: $\phi 8$, 3000h: $\phi 10$) (4000 hours: 63V to 100V - $\phi 16 \times 20L$)</th> </tr> </thead> <tbody> <tr> <td>Leakage current</td> <td>The initial specified value or less</td> </tr> <tr> <td>Percentage of capacitance change</td> <td>Within ±30% of initial value</td> </tr> <tr> <td>Tangent of the loss angle</td> <td>300% or less of the initial specified value</td> </tr> </tbody> </table>	Test time	5000 hours (2000 hours: $\phi 8$, 3000h: $\phi 10$) (4000 hours: 63V to 100V - $\phi 16 \times 20L$)	Leakage current	The initial specified value or less	Percentage of capacitance change	Within ±30% of initial value	Tangent of the loss angle	300% or less of the initial specified value										
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Shelf life (125°C)	Test time : 1000hours ; other items are same as the endurance. Voltage application treatment : According to JIS C5101-4 4.1																		
Applicable standards	JIS C5101 - 1, - 4 (IEC 60384 - 1, - 4)																		

Outline Drawing

Unit : mm



Coefficient of Frequency for Rated Ripple Current

Rated capacitance (µF)	Frequency (Hz)			
	50 · 60	120	1k	10k · 100k
100 to 330	0.55	0.65	0.85	1
390 to 1000	0.70	0.75	0.90	1
1200 to 6800	0.80	0.85	0.95	1

Product code system : 10V1000µF (*For general product)

RS*	RKD	102	M	1L	F20		T
Category code	Series code	capacitance code	Cap tol. code	Voltage code	Size code	Lead-forming and packing code	Additional code

- If it is whisker preventive structure, should change "T" into "G".
- For details, refer to the various "Product Code System" pages.

Standard Ratings

Rated voltage (V)	Item	10 (1L)				16 (1E)				25 (1T)				35 (1G)			
		Case φD × L (mm)	Size code	ESR (Ω max.)	Rated ripple current (mA rms)	Case φD × L (mm)	Size code	ESR (Ω max.)	Rated ripple current (mA rms)	Case φD × L (mm)	Size code	ESR (Ω max.)	Rated ripple current (mA rms)	Case φD × L (mm)	Size code	ESR (Ω max.)	Rated ripple current (mA rms)
100	—	—	—	—	8×12	E12	0.153	501	8×12	E12	0.153	501	8×12	E12	0.153	501	
220	8×12	E12	0.153	501	8×12	E12	0.153	501	8×12	E12	0.153	501	10×12.5	F12	0.098	732	
					10×12.5	F12	0.098	732	10×12.5	F12	0.098	732	10×16	F16	0.075	953	
330	8×12	E12	0.153	501	8×12	E12	0.153	501	10×12.5	F12	0.098	732	10×16	F16	0.075	953	
	10×12.5	F12	0.098	732	10×12.5	F12	0.098	732	10×16	F16	0.075	953	10×20	F20	0.057	1140	
470	10×12.5	F12	0.098	732	10×16	F16	0.075	953	10×16	F16	0.075	953	10×20	F20	0.057	1140	
									10×20	F20	0.057	1140	12.5×20	G20	0.040	1820	
									12.5×20	G20	0.040	1820	12.5×25	G25	0.032	2400	
1000	10×20	F20	0.057	1140	12.5×20	G20	0.040	1820	12.5×25	G25	0.032	2400	16×25	J25	0.024	3100	
	12.5×15	G15	0.059	1380	16×16	J16	0.044	1930	16×16	J16	0.044	1930	18×20	K20	0.029	2490	
1200	—	—	—	—	—	—	—	—	12.5×20	G20	0.040	1820	12.5×30	G30	0.029	2560	
													16×20	J20	0.032	2280	
1500	—	—	—	—	—	—	—	—	—	—	—	—	12.5×35	G35	0.023	2970	
													16×31.5	J31	0.020	3160	
													18×25	K25	0.022	3200	
1800	—	—	—	—	—	—	—	—	12.5×25	G25	0.032	2400	12.5×40	G40	0.020	3600	
									16×20	J20	0.032	2280	16×25	J25	0.024	3100	
2200	12.5×25	G25	0.032	2400	12.5×25	G25	0.032	2400	12.5×30	G30	0.029	2560	16×31.5	J31	0.020	3160	
	16×20	J20	0.032	2280	16×25	J25	0.024	3100	16×25	J25	0.024	3100	16×35.5	J35	0.019	3590	
	18×16	K16	0.041	2170	18×20	K20	0.029	2490	18×20	K20	0.029	2490	18×25	K25	0.022	3200	
2700	—	—	—	—	—	—	—	—	12.5×35	G35	0.023	2970	16×35.5	J35	0.019	3590	
									16×25	J25	0.024	3100	18×31.5	K31	0.018	3410	
									18×20	K20	0.029	2490	18×40	K40	0.017	4300	
3300	16×25	J25	0.024	3100	16×31.5	J31	0.020	3160	12.5×40	G40	0.020	3600	16×40	J40	0.017	4300	
	18×20	K20	0.029	2490	18×25	K25	0.022	3200	16×31.5	J31	0.020	3160	18×35.5	K35	0.017	4200	
3900	—	—	—	—	—	—	—	—	16×35.5	J35	0.019	3590	—	—	—	—	
									18×25	K25	0.022	3200	—	—	—	—	
4700	16×31.5	J31	0.020	3160	16×35.5	J35	0.019	3590	18×35.5	K35	0.017	4200	18×40	K40	0.016	4600	
	18×25	K25	0.022	3200	18×31.5	K31	0.018	3410	—	—	—	—	—	—	—	—	
5600	—	—	—	—	—	—	—	—	16×40	J40	0.017	4300	—	—	—	—	
									18×35.5	K35	0.017	4200	—	—	—	—	
6800	—	—	—	—	—	—	—	—	18×40	K40	0.016	4600	—	—	—	—	

Rated voltage (V)	Item	50 (1U)				63 (4E)				80 (1R)				100 (1H)			
		Case φD × L (mm)	Size code	ESR (Ω max.)	Rated ripple current (mA rms)	Case φD × L (mm)	Size code	ESR (Ω max.)	Rated ripple current (mA rms)	Case φD × L (mm)	Size code	ESR (Ω max.)	Rated ripple current (mA rms)	Case φD × L (mm)	Size code	ESR (Ω max.)	Rated ripple current (mA rms)
220	10×20	F20	0.081	960	—	—	—	—	—	—	—	—	16×20	J20	0.22	1100	
330	—	—	—	—	—	—	—	—	—	—	—	—	16×25	J25	0.12	1500	
470	12.5×20	G20	0.057	1500	—	—	—	—	16×20	J20	0.19	1200	16×35.5	J35	0.077	2000	
560	—	—	—	—	—	—	—	—	16×25	J25	0.11	1530	16×40	J40	0.069	2200	
820	12.5×30	G30	0.038	2150	16×31.5	J31	0.08	1910	18×25	K25	0.094	1640	18×40	K40	0.059	2330	
1000	16×25	J25	0.031	2620	16×35.5	J35	0.066	2110	18×35.5	K35	0.062	2180	—	—	—	—	
1800	18×31.5	K31	0.025	3140	18×40	K40	0.051	2470	18×40	K40	0.051	2470	—	—	—	—	
2200	18×35.5	K35	0.022	3510	—	—	—	—	—	—	—	—	—	—	—	—	

(Note) Rated ripple current : 125°C , 100kHz ; ESR : 20°C , 100kHz