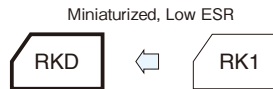


ELNA**Miniature Aluminum Electrolytic Capacitors RKD series**

Code in front of series have been extracted from product code, which describes the segment of products, such as type and features.

- Low ESR capacitor.
- Guaranteed 5000 hours at 125°C.
(2000 hours: $\phi 8$, 3000 hours; $\phi 10$)
(4000 hours: 63V to 80V - $\phi 16 \times 20L$)
- Environmental : GREEN CAP™, RoHS compliance.



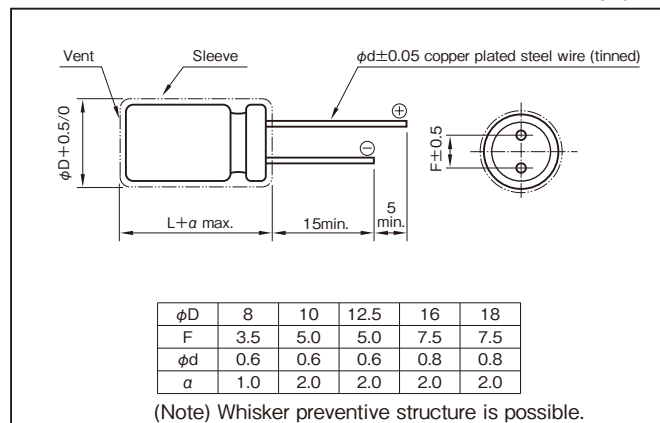
Marking color : White print on a black sleeve

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><tr><td colspan="2">Rated voltage (V)</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td><td>63</td><td>80</td></tr><tr><td colspan="2">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></tr></table>								Rated voltage (V)		10	16	25	35	50	63	80	tanδ (max.)		0.20	0.16	0.14	0.12	0.10	0.10	0.08														
	Rated voltage (V)		10	16	25	35	50	63	80																															
	tanδ (max.)		0.20	0.16	0.14	0.12	0.10	0.10	0.08																															
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>10</td><td>16</td><td>25</td><td>35</td><td>50</td><td>63</td><td>80</td></tr><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></table>								Rated voltage (V)		10	16	25	35	50	63	80	Impedance ratio (max.)	Z-40°C/Z+20°C	4	3	3	3	3	3	3														
	Rated voltage (V)		10	16	25	35	50	63	80																															
	Impedance ratio (max.)	Z-40°C/Z+20°C	4	3	3	3	3	3	3																															
(120Hz)																																								
Endurance (125°C) (Applied ripple current)	<table><tr><td colspan="2">Test time</td><td colspan="6">5000 hours (2000 hours: φ8, 3000h: φ10) (4000 hours: 63V to 80V - φ16x20L)</td></tr><tr><td colspan="2">Leakage current</td><td colspan="6">The initial specified value or less</td></tr><tr><td colspan="2">Percentage of capacitance change</td><td colspan="6">Within ±30% of initial value</td></tr><tr><td colspan="2">Tangent of the loss angle</td><td colspan="6">300% or less of the initial specified value</td></tr></table>								Test time		5000 hours (2000 hours: φ8, 3000h: φ10) (4000 hours: 63V to 80V - φ16x20L)						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					
	Test time		5000 hours (2000 hours: φ8, 3000h: φ10) (4000 hours: 63V to 80V - φ16x20L)																																					
	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																																						
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 : 10V1000 μF (*For general product)

RS*	RKD	102	M	1L	F20	300	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.
- Lead-forming and packing code on this page are for lead long and standard packing products.
For standard packing, please refer to the "PACKING" page.

NOTE : Design, Specifications are subject to change without notice.
It is recommended that you shall obtain technical specifications from ELNA to ensure that the component is suitable for your use.

Code in front of series have been extracted from product code, which describes the segment of products, such as type and features.

Standard Ratings

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

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