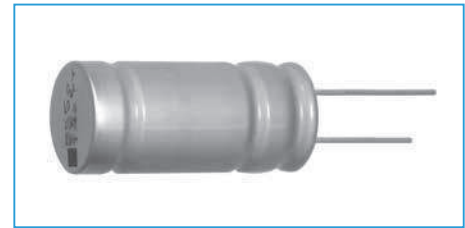


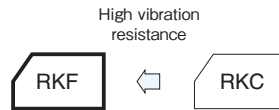
135°C Use, Miniature, Low ESR, High Vibration Resistance Capacitors

GREEN CAP	High Vibration Resistance	Low ESR	135°C 3000hours	Anti-cleaning solvent
-----------	---------------------------	---------	-----------------	-----------------------

- Vibration resistance (40G, 10 to 2000Hz, X, Y, Z = per 2hours).
- For Automotive application (ABS and electric power steering etc.)
- Guaranteed 3000 hours at 135°C (63V to 100V : Guaranteed 2000 hours)



Marking color : Black print

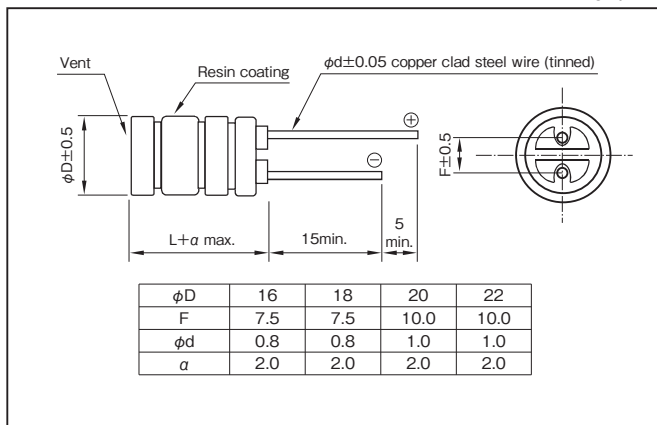


Specifications

Item	Performance														
Category temperature range (°C)	-40 to +135														
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 border="1"> <tr> <th>Rated voltage (V)</th> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>80</td> <td>100</td> </tr> <tr> <th>tanδ (max.)</th> <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> </table>	Rated voltage (V)	25	35	50	63	80	100	tanδ (max.)	0.14	0.12	0.10	0.10	0.08	0.08
	Rated voltage (V)	25	35	50	63	80	100								
tanδ (max.)	0.14	0.12	0.10	0.10	0.08	0.08									
0.02 is added to every 1000µF increase over 1000µF. (20°C, 120Hz)															
Characteristics at high and low temperature	<table border="1"> <tr> <th>Rated voltage (V)</th> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>80</td> <td>100</td> </tr> <tr> <th>Impedance ratio (max.)</th> <td>Z-40°C/Z+20°C</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> </table>	Rated voltage (V)	25	35	50	63	80	100	Impedance ratio (max.)	Z-40°C/Z+20°C	3	3	3	3	3
	Rated voltage (V)	25	35	50	63	80	100								
Impedance ratio (max.)	Z-40°C/Z+20°C	3	3	3	3	3									
(120Hz)															
Endurance (135°C or 125°C) (Applied ripple current)	Test time	3000 hours (63V to 100V : 2000 hours)													
	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 (135°C)	Test time : 1000hours ; other items are same as the endurance. Voltage application treatment : According to JIS C5101-4														
Vibration	Vibration test condition														
	Frequency range	10 to 2000Hz													
	Displacement amplitude	1.5 mm max.													
	Acceleration	40G (392m/s²) max.													
	Sweep rate	0.5 octave/min.													
	Vibration axis and duration	X, Y, Z per 2 hours, total 6 hours													
	Fixation	Capacitor mounted by its body which is rigidly clamped to the work surface.													
	Specification after test														
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														
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
180 to 330	0.65	0.85	1.00	1
390 to 1000	0.75	0.90	1.00	1
1100 to 10000	0.85	0.95	1.00	1

Part numbering system (example : 35V3600µF)

RKF	—	35	V	362	M	K7	#	—	□
Series code		Rated voltage symbol		Rated capacitance symbol	Capacitance tolerance symbol	Casing symbol			Forming symbol

Standard Ratings

Rated voltage (V)	Rated capacitance $\phi D \times L$ (mm)	Case $\phi D \times L$ (mm)	Casing symbol	ESR (Ω max. / 100kHz)		Rated ripple current (mA rms / 100kHz)	
				20°C	-40°C	135°C	125°C
				25	1800	12.5 × 25	I6
2200	12.5 × 30	I7	0.028		0.24	2900	4490
2700	12.5 × 35	I8	0.025		0.21	3190	5140
3300	12.5 × 40	I9	0.024		0.19	3470	5810
4700	16 × 31.5	J7	0.023		0.18	3400	5480
5400	16 × 35.5	J8	0.020		0.14	3630	6070
6200	16 × 40	J9	0.019		0.12	3930	6810
6200	18 × 31.5	K7	0.022		0.16	3470	5600
7800	18 × 35.5	K8	0.019		0.12	3750	6280
8200	18 × 40	K9	0.018		0.10	4080	7070
9500	20 × 40	L9	0.016		0.090	4570	7950
10000	22 × 40	N9	0.016		0.090	5000	8700
35	1100	12.5 × 25	I6	0.033	0.30	2010	3480
	1500	12.5 × 30	I7	0.028	0.24	2900	4490
	1800	12.5 × 35	I8	0.025	0.21	3190	5140
	2000	12.5 × 40	I9	0.024	0.19	3470	5810
	2700	16 × 31.5	J7	0.023	0.18	3400	5480
	3100	16 × 35.5	J8	0.020	0.14	3630	6070
	3600	16 × 40	J9	0.019	0.12	3930	6810
	3600	18 × 31.5	K7	0.022	0.16	3470	5600
	4700	18 × 35.5	K8	0.019	0.12	3750	6280
	5400	18 × 40	K9	0.018	0.10	4080	7070
	5900	20 × 40	L9	0.016	0.090	4570	7950
	6200	22 × 40	N9	0.016	0.090	5000	8700
50	560	12.5 × 25	I6	0.079	0.39	2260	3350
	750	12.5 × 30	I7	0.065	0.30	2520	4220
	900	12.5 × 35	I8	0.057	0.25	2780	4810
	1000	12.5 × 40	I9	0.050	0.22	3020	5240
	1300	16 × 31.5	J7	0.048	0.20	2960	5130
	1600	16 × 35.5	J8	0.039	0.15	3160	5480
	1900	16 × 40	J9	0.034	0.14	3420	5930
	2000	18 × 31.5	K7	0.038	0.15	3020	5240
	2400	18 × 35.5	K8	0.033	0.12	3390	5870
	2600	18 × 40	K9	0.031	0.11	3700	6420
	3300	20 × 40	L9	0.027	0.10	4200	7260
	3300	22 × 40	N9	0.027	0.10	4420	7660

Rated voltage (V)	Rated capacitance $\phi D \times L$ (mm)	Case $\phi D \times L$ (mm)	Casing symbol	ESR (Ω max. / 100kHz)		Rated ripple current (mA rms / 100kHz)	
				20°C	-40°C	135°C	125°C
				63	390	12.5 × 25	I6
560	12.5 × 30	I7	0.061		0.30	2630	3110
650	12.5 × 35	I8	0.051		0.25	2970	3760
750	12.5 × 40	I9	0.045		0.22	3260	4610
1000	16 × 31.5	J7	0.049		0.20	3050	3860
1300	16 × 35.5	J8	0.039		0.15	3420	4590
1300	18 × 31.5	K7	0.041		0.15	3220	4080
1500	16 × 40	J9	0.036		0.14	3670	5190
1800	18 × 35.5	K8	0.032		0.12	3690	5220
2000	18 × 40	K9	0.031		0.11	3820	5660
2500	20 × 40	L9	0.026		0.10	4580	6480
2500	22 × 40	N9	0.026		0.10	4830	6830
80	290	12.5 × 25	I6	0.076	0.39	2050	2520
	420	12.5 × 30	I7	0.061	0.30	2630	3110
	490	12.5 × 35	I8	0.051	0.25	2970	3760
	570	12.5 × 40	I9	0.045	0.22	3260	4610
	750	16 × 31.5	J7	0.049	0.20	3050	3860
	820	16 × 35.5	J8	0.039	0.15	3420	4590
	820	18 × 31.5	K7	0.041	0.15	3220	4080
	950	16 × 40	J9	0.036	0.14	3670	5190
	1200	18 × 35.5	K8	0.032	0.12	3690	5220
	1300	18 × 40	K9	0.031	0.11	3820	5660
	1500	20 × 40	L9	0.026	0.10	4580	6480
	1500	22 × 40	N9	0.026	0.10	4830	6830
100	180	12.5 × 25	I6	0.099	0.55	1960	2140
	250	12.5 × 30	I7	0.076	0.41	2330	2950
	290	12.5 × 35	I8	0.065	0.35	2630	3530
	330	12.5 × 40	I9	0.055	0.29	2920	4140
	420	16 × 31.5	J7	0.060	0.27	2720	3440
	510	18 × 31.5	K7	0.054	0.20	2920	3920
	510	16 × 35.5	J8	0.052	0.23	2960	4190
	570	16 × 40	J9	0.041	0.18	3380	5020
	680	18 × 35.5	K8	0.044	0.16	3330	4710
	820	18 × 40	K9	0.038	0.14	3560	5280
	950	20 × 40	L9	0.033	0.13	3820	5410
	1000	22 × 40	N9	0.033	0.13	4030	5700

ALUMINUM

MINIATURE ALUMINUM

135°C

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.