RKG MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

ELNA®

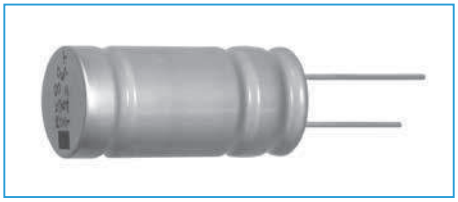
150°C Use, Miniature, Low ESR, High Vibration Resistance Capacitors

GREEN CAP | High Vibration Resistance | Low ESR | 150°C 2000hours | Anti-cleaning solvent

- Vibration resistance (40G,10 to 2000Hz, X,Y,Z = per 2hours).
- For Automotive application (ABS and electric power steering etc.)
- Guaranteed 2000 hours at 150℃
  (63V, 80V : 1000 hours)

High vibration resistance

RKG ⇦ RQA



Marking color : Black print

Specifications

Item	Performance
Category temperature range (℃)	−40 to +150
Tolerance at rated capacitance (%)	±20 (20℃,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℃)

Tangent of loss angle (tanδ)

Rated voltage (V)	25	35	50	63	80
tanδ (max.)	0.14	0.12	0.10	0.10	0.08

0.02 is added to every 1000μF increase over 1000μF. (20℃,120Hz)

Characteristics at high and low temperature

Rated voltage (V)		25	35	50	63	80
Impedance ratio (max.)	Z−40℃/Z+20℃	3	3	3	3	3

(120Hz)

Endurance (150℃ or 125℃) (Applied ripple current)

Test time	2000 hours (63V, 80V : 1000 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 (150℃)	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 mouted by its body which is rigidly clamped to the work surface.

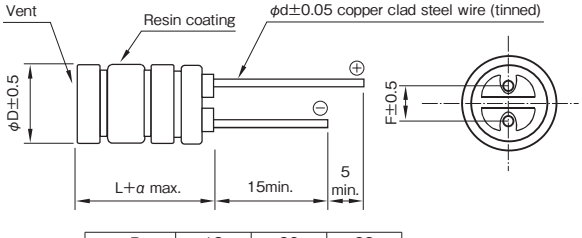
Specification after test

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



ϕD	18	20	22
F	7.5	10.0	10.0
ϕd	0.8	1.0	1.0
α	2.0	2.0	2.0

Coefficient of Frequency for Rated Ripple Current

Rated capacitance (μF) \ Frequency (Hz)	120	1k	10k	100k
800 to 1000	0.75	0.90	1.00	1
1100 to 4700	0.85	0.95	1.00	1

Part numbering system (example : 35V2700μF)

RKG — 35 V 272 M K9 # — ⬚

Series code	Rated voltage symbol	Rated capacitance symbol	Capacitance tolerance symbol	Casing symbol	Forming symbol

Standard Ratings

Rated voltage (V) / Item: Rated capacitance (μF)	25 Case ϕD × L (mm)	25 Casing symbol	25 ESR (Ω max. / 100kHz) 20℃	25 ESR 40℃	25 Rated ripple current (mArms / 100kHz) 150℃	25 Rated ripple current 125℃	35 Case ϕD × L (mm)	35 Casing symbol	35 ESR 20℃	35 ESR 40℃	35 Rated ripple current 150℃	35 Rated ripple current 125℃	50 Case ϕD × L (mm)	50 Casing symbol	50 ESR 20℃	50 ESR 40℃	50 Rated ripple current 150℃	50 Rated ripple current 125℃
1800	—	—	—	—	—	—	—	—	—	—	—	—	18 × 42	K9	0.034	0.12	2800	7000
2400	—	—	—	—	—	—	—	—	—	—	—	—	20 × 42	L9	0.030	0.11	3200	9000
													22 × 42	N9	0.030	0.11	3400	9500
2700	—	—	—	—	—	—	18 × 42	K9	0.020	0.11	3100	8000	—	—	—	—	—	—
3300	—	—	—	—	—	—	20 × 42	L9	0.018	0.10	3500	10000	—	—	—	—	—	—
							22 × 42	N9	0.018	0.10	3700	10500						
3900	18 × 42	K9	0.020	0.11	3100	8000	—	—	—	—	—	—	—	—	—	—	—	—
4700	20 × 42	L9	0.018	0.10	3500	10000	—	—	—	—	—	—	—	—	—	—	—	—
	22 × 42	N9	0.018	0.10	3700	10500												

Rated voltage (V) / Item: Rated capacitance (μF)	63 Case ϕD × L (mm)	63 Casing symbol	63 ESR (Ω max. / 100kHz) 20℃	63 ESR 40℃	63 Rated ripple current (mArms / 100kHz) 150℃	63 Rated ripple current 125℃	80 Case ϕD × L (mm)	80 Casing symbol	80 ESR 20℃	80 ESR 40℃	80 Rated ripple current 150℃	80 Rated ripple current 125℃
800	—	—	—	—	—	—	18 × 42	K9	0.034	0.12	2900	7300
1000	—	—	—	—	—	—	20 × 42	L9	0.029	0.11	3300	9300
1100	—	—	—	—	—	—	22 × 42	N9	0.029	0.11	3500	9800
1200	18 × 42	K9	0.034	0.12	2900	7300	—	—	—	—	—	—
1500	20 × 42	L9	0.029	0.11	3300	9300	—	—	—	—	—	—
1800	22 × 42	N9	0.029	0.11	3500	9800	—	—	—	—	—	—

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.