RTT VERTICAL CHIP TYPE ALUMINUM ELECTROLYTIC CAPACITORS

ELNA®

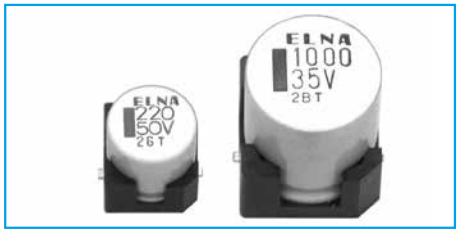
Chip Type 125˚C Use, Low ESR, For Vibration Capacitors

GREEN CAP | SMD | Vibration Resistance | Low ESR | 125˚C 2000hours | Anti-cleaning solvent

- Compatible with surface mounting.
- For Vibration resistance. (30G guaranteed)
- Supplied with carrier taping.
- Guarantees 2000 hours at 125℃.
  (φ12.5 or more : 5000h)

Vibration resistance

RTT ⇦ RVT



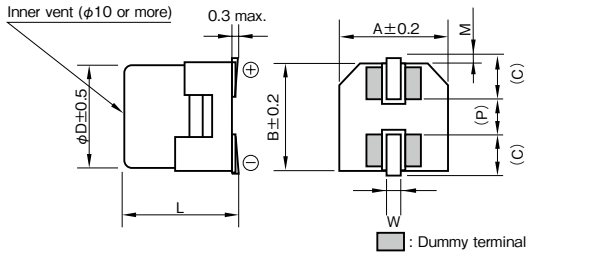
Marking color : Black print

Specifications

Item	Performance
Category temperature range (℃)	−40 to +125
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): 10 / 16 / 25 / 35 / 50 / 63 / 80 / 100 Tangent of loss angle: 0.24 / 0.20 / 0.16 / 0.14 / 0.14 / 0.12 / 0.12 / 0.10 0.02 is added to every 1000μF increase over 1000μF (20℃,120Hz)
Characteristics at high and low temperature	Rated voltage (V): 10 / 16 / 25 / 35 / 50 / 63 / 80 / 100 Impedance ratio (max.) Z−25℃/Z+20℃: 3 / 2 / 2 / 2 / 2 / 2 / 2 / 2 Impedance ratio (max.) Z−40℃/Z+20℃: 4 / 3 / 3 / 3 / 3 / 3 / 3 / 3 (120Hz)
Endurance (125℃)	Test time: 2000 hours (φ12.5 or more : 5000h) Leakage current: The initial specified value or less Percentage of capacitance change: Within ±30% of initial value Tangent of loss angle: 300% or less of the initial specified value
Shelf life (125℃)	Test time : 1000hours ; other items are same as the endurance. Voltage application treatment : According to JIS C5101-4
Applicable standards	JIS C5101-1 1998, -18 1999 (IEC 60384-1 1992, -18 1993)

Outline Drawing

Unit : mm



( ) : Reference size

φD	L	A	B	C	W	P	M	Casing symbol
8	10±0.5	8.4	8.4	3.0	0.7 to 1.1	3.1	0.4±0.2	G10
10	10±0.5	10.4	10.4	3.3	0.7 to 1.1	4.7	0.4±0.2	H10
12.5	13.5±0.5	13.0	13.0	4.9	1.0 to 1.4	4.6	0.7±0.3	IE
16	16.5±0.5	17.0	17.0	5.6	1.0 to 1.4	7.2	0.7±0.3	JH
16	21.5±0.5	17.0	17.0	5.6	1.0 to 1.4	7.2	0.7±0.3	JM
18	16.5±0.5	19.0	19.0	6.6	1.0 to 1.4	7.2	0.7±0.3	KH
18	21.5±0.5	19.0	19.0	6.6	1.0 to 1.4	7.2	0.7±0.3	KM

Coefficient of Frequency for Rated Ripple Current

Frequency (Hz) / Rated voltage (V)	120	1k	10k	100k
10 to 100	0.77	0.88	0.96	1

Part numbering system

φ8, φ10 (example : 35V100μF)

RTT — 35 V 101 M H10 SU — □

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

φ12.5 or more (example : 35V1000μF)

RTT — 35 V 102 M KM T — □

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

If "Standard (terminal)" type is required, please see the series RVT of page 78.

- Soldering conditions are described on page 15.
- Land pattern size are described on page 13.
- The taping specifications are described on page 16.

Standard Ratings

Rated voltage (V) / Item: Rated capacitance (μF)	10				16				25				35				50			
	Case φD×L (mm)	ESR (Ω max.) 20℃	ESR (Ω max.) −40℃	Rated ripple current (mArms)	Case φD×L (mm)	ESR (Ω max.) 20℃	ESR (Ω max.) −40℃	Rated ripple current (mArms)	Case φD×L (mm)	ESR (Ω max.) 20℃	ESR (Ω max.) −40℃	Rated ripple current (mArms)	Case φD×L (mm)	ESR (Ω max.) 20℃	ESR (Ω max.) −40℃	Rated ripple current (mArms)	Case φD×L (mm)	ESR (Ω max.) 20℃	ESR (Ω max.) −40℃	Rated ripple current (mArms)
100	–	–	–	–	–	–	–	–	–	–	–	–	8×10	0.20	2.0	340	10×10	0.50	7.5	250
													10×10	0.15	1.5	500	12.5×13.5	0.18	2.7	550
220	–	–	–	–	8×10	0.20	2.0	340	8×10	0.20	2.0	340	8×10	0.20	2.0	340	12.5×13.5	0.18	2.7	550
					10×10	0.15	1.5	500	10×10	0.15	1.5	500	10×10	0.15	1.5	500				
330	8×10	0.20	2.0	340	10×10	0.15	1.5	500	10×10	0.15	1.5	500	12.5×13.5	0.086	1.29	750	16×16.5	0.12	1.8	850
	10×10	0.15	1.5	500					12.5×13.5	0.086	1.29	750	16×16.5	0.060	0.90	1000				
470	10×10	0.15	1.5	500	12.5×13.5	0.086	1.29	750	12.5×13.5	0.086	1.29	750	16×16.5	0.060	0.90	1000	18×16.5	0.10	1.5	920
									16×16.5	0.060	0.90	1000								
680	12.5×13.5	0.086	1.29	750	12.5×13.5	0.086	1.29	750	16×16.5	0.060	0.90	1000	18×16.5	0.050	0.75	1200	–	–	–	–
					16×16.5	0.060	0.90	1000	18×16.5	0.050	0.75	1200								
1000	12.5×13.5	0.086	1.29	750	18×16.5	0.050	0.75	1200	18×21.5	0.042	0.63	1550	18×21.5	0.042	0.63	1550	–	–	–	–
2200	16×16.5	0.060	0.90	1000	18×16.5	0.050	0.75	1200	–	–	–	–	–	–	–	–	–	–	–	–
3300	18×16.5	0.050	0.75	1200	18×21.5	0.042	0.63	1550	–	–	–	–	–	–	–	–	–	–	–	–
4700	18×21.5	0.042	0.63	1550	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Rated voltage (V) / Item: Rated capacitance (μF)	63				80				100			
	Case φD×L (mm)	ESR (Ω max.) 20℃	ESR (Ω max.) −40℃	Rated ripple current (mArms)	Case φD×L (mm)	ESR (Ω max.) 20℃	ESR (Ω max.) −40℃	Rated ripple current (mArms)	Case φD×L (mm)	ESR (Ω max.) 20℃	ESR (Ω max.) −40℃	Rated ripple current (mArms)
47	–	–	–	–	–	–	–	–	12.5×13.5	0.32	4.8	300
100	12.5×13.5	0.25	3.75	400	16×16.5	0.24	3.6	480	16×16.5	0.24	3.6	480
220	16×16.5	0.22	3.3	500	16×21.5	0.18	2.7	600	18×21.5	0.16	2.4	700
330	16×16.5	0.22	3.3	500	18×21.5	0.12	1.8	1000	–	–	–	–
470	16×21.5	0.16	2.4	650	–	–	–	–	–	–	–	–

(Note) Rated ripple current : 105℃ , 100kHz, ESR : 100kHz