RVD VERTICAL CHIP TYPE ALUMINUM ELECTROLYTIC CAPACITORS

ELNA®

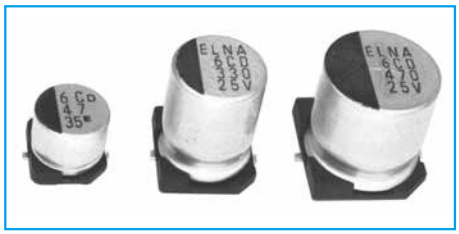
Chip Type, 105˚C Use, Low Impedance, Long Life Capacitors

GREEN CAP | SMD | Low Z | 105˚C 2000hours | Anti-cleaning solvent

- Compatible with surface mounting.
- Supplied with carrier taping.
- Guarantees 2000 hours at 105℃.
  (6.3 to 50V 10.0L,10.5L:5000 hours)
  (φ12.5x13.5L: 5000 hours)

Low Z, Long life

RVD ⇦ RVZ



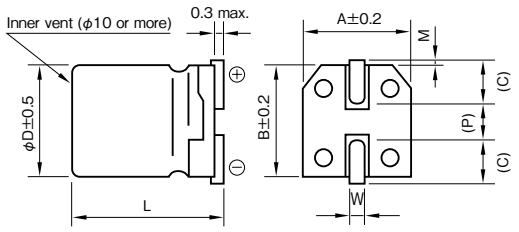
Marking color : Black print

Specifications

Item	Performance
Category temperature range (℃)	−55 to +105
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): 6.3 / 10 / 16 / 25 / 35 / 50 / 63 / 80 / 100 tanδ (max.): 0.26 / 0.19 / 0.16 / 0.14 / 0.12 / 0.10 / 0.08 / 0.08 / 0.07 0.02 is added to every 1000μF increase over 1000μF. (20℃,120Hz)
Characteristics at high and low temperature	Rated voltage (V): 6.3 / 10 / 16 / 25 / 35 / 50 / 63 / 80 / 100 Impedance ratio (max.) Z−25℃/Z+20℃: 2 / 2 / 2 / 2 / 2 / 2 / 2 / 2 / 2 Impedance ratio (max.) Z−40℃/Z+20℃: 3 / 3 / 3 / 3 / 3 / 3 / 3 / 3 / 3 Impedance ratio (max.) Z−55℃/Z+20℃: 8 / 4 / 4 / 3 / 3 / 3 / 3 / 3 / 3 (120Hz)
Endurance (105℃)	Test time: 2000 hours (6.3 to 50V 10.0L,10.5L,φ12.5x13.5L : 5000 hours) Leakage current: The initial specified value or less Percentage of capacitance change: Within ±30% of initial value Tangent of the loss angle: 200% or less of the initial specified value (6.3 to 50V 10.0L,10.5L,φ12.5x13.5L : 300% or less)
Shelf life (105℃)	Test time : 1000hours ; other items are same as the endurance. Voltage application treatment : According to JIS C5101-4
Applicable standards	JIS C 5101-1 1998, -18 1999(IEC 60384-1 1992, -18 1993)

Outline Drawing

Unit : mm



( ): Reference size

φD	L	A	B	C	M	W	P	Casing symbol
4	5.8±0.3	4.3	4.3	2.0	0.4±0.2	0.5 to 0.8	1.0	D61
5	5.8±0.3	5.3	5.3	2.3	0.4±0.2	0.5 to 0.8	1.5	E61
6.3	5.8±0.3	6.6	6.6	2.7	0.4±0.2	0.5 to 0.8	2.0	F61
6.3	7.7±0.3	6.6	6.6	2.7	0.4±0.2	0.5 to 0.8	2.0	F80
8	6.5±0.3	8.4	8.4	3.4	0.4±0.2	0.5 to 0.8	2.3	G68
8	10±0.5	8.4	8.4	3.0	0.4±0.2	0.7 to 1.1	3.1	G10
8	10.5±0.5	8.4	8.4	3.0	0.4±0.2	0.7 to 1.1	3.1	GA5
10	10±0.5	10.4	10.4	3.3	0.4±0.2	0.7 to 1.1	4.7	H10
10	10.5±0.5	10.4	10.4	3.3	0.4±0.2	0.7 to 1.1	4.7	HA5
12.5	13.5±0.5	13.0	13.0	4.9	0.7±0.3	1.0 to 1.4	4.6	IE

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

Coefficient of Frequency for Rated Ripple Current

Rated voltage (V) \ Frequency (Hz)	50・60	120	1k	10k・100k
6.3 to 100	0.50	0.50	0.75	1

Part numbering system

φ10X10.5L or less (example : 16V100μF)

RVD	—	16	V	101	M	F61	U	—	□
Series code		Rated voltage symbol		Rated capacitance symbol	Capacitance tolerance symbol	Casing symbol			Taping symbol

In the case of "for High Temperature Reflow" type, a series name is "RZB".

φ12.5X13.5 (example : 16V1000μF)

RVD	—	16	V	102	M	IE	T	—	R5
Series code		Rated voltage symbol		Rated capacitance symbol	Capacitance tolerance symbol	Casing symbol			Taping symbol

If "For Vibration Resistance" type is required, please see the series RTD of page 89.

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.

Standard Ratings

Rated voltage (V) / Item / Rated capacitance (μF)	6.3				10				16			
	Case φD×L (mm)	Casing symbol	Impedance (Ω max.)	Rated ripple current (mArms)	Case φD×L (mm)	Casing symbol	Impedance (Ω max.)	Rated ripple current (mArms)	Case φD×L (mm)	Casing symbol	Impedance (Ω max.)	Rated ripple current (mArms)
10	—	—	—	—	—	—	—	—	4×5.8	D61	1.35	90
22	4×5.8	D61	1.35	90	4×5.8	D61	1.35	90	4×5.8	D61	1.35	90
									5×5.8	E61	0.70	170
33	—	—	—	—	4×5.8	D61	1.35	90	—	—	—	—
					5×5.8	E61	0.70	170				
47	4×5.8	D61	1.35	90	—	—	—	—	5×5.8	E61	0.70	170
	5×5.8	E61	0.70	170					6.3×5.8	F61	0.36	250
100	5×5.8	E61	0.70	170	—	—	—	—	6.3×5.8	F61	0.36	250
	6.3×5.8	F61	0.36	250								
220	6.3×5.8	F61	0.36	250	6.3×7.7	F80	0.30	300	6.3×7.7	F80	0.30	300
					8×6.5	G68	0.30	300	8×6.5	G68	0.30	300
330	6.3×7.7	F80	0.30	300	8×10	G10	0.16	600	8×10	G10	0.16	600
	8×6.5	G68	0.30	300								
470	8×10	G10	0.16	600	8×10	G10	0.16	600	8×10	G10	0.16	600
680	—	—	—	—	8×10	G10	0.16	600	10×10	H10	0.090	850
									10×10.5	HA5	0.080	850
1000	8×10	G10	0.16	600	10×10	H10	0.090	850	12.5×13.5	IE	0.054	1160
					10×10.5	HA5	0.080	850				
1500	10×10	H10	0.090	850	12.5×13.5	IE	0.054	1160	12.5×13.5	IE	0.054	1160
	10×10.5	HA5	0.080	850								
2200	12.5×13.5	IE	0.054	1160	12.5×13.5	IE	0.054	1160	—	—	—	—

Rated voltage (V) / Item / Rated capacitance (μF)	25				35				50			
	Case φD×L (mm)	Casing symbol	Impedance (Ω max.)	Rated ripple current (mArms)	Case φD×L (mm)	Casing symbol	Impedance (Ω max.)	Rated ripple current (mArms)	Case φD×L (mm)	Casing symbol	Impedance (Ω max.)	Rated ripple current (mArms)
4.7	—	—	—	—	4×5.8	D61	1.35	90	4×5.8	D61	2.7	60
10	4×5.8	D61	1.35	90	4×5.8	D61	1.35	90	5×5.8	E61	1.5	90
					5×5.8	E61	0.70	170	6.3×5.8	F61	0.86	170
22	5×5.8	E61	0.70	170	5×5.8	E61	0.70	170	6.3×5.8	F61	0.86	170
33	5×5.8	E61	0.70	170	6.3×5.8	F61	0.36	250	6.3×7.7	F80	0.66	195
	6.3×5.8	F61	0.36	250					8×6.5	G68	0.63	200
47	6.3×5.8	F61	0.36	250	6.3×5.8	F61	0.36	250	6.3×7.7	F80	0.66	195
									8×6.5	G68	0.63	200
100	6.3×7.7	F80	0.30	300	6.3×7.7	F80	0.30	300	8×10	G10	0.34	350
	8×6.5	G68	0.30	300	8×10	G10	0.16	600	8×10.5	GA5	0.32	350
220	8×10	G10	0.16	600	8×10	G10	0.16	600	10×10	H10	0.20	700
									10×10.5	HA5	0.18	700
330	8×10	G10	0.16	600	10×10	H10	0.090	850	12.5×13.5	IE	0.12	900
					10×10.5	HA5	0.080	850				
470	10×10	H10	0.090	850	12.5×13.5	IE	0.054	1160	—	—	—	—
	10×10.5	HA5	0.080	850								
680	12.5×13.5	IE	0.054	1160	12.5×13.5	IE	0.054	1160	—	—	—	—
1000	12.5×13.5	IE	0.054	1160	—	—	—	—	—	—	—	—

Rated voltage (V) / Item / Rated capacitance (μF)	63				80				100			
	Case φD×L (mm)	Casing symbol	Impedance (Ω max.)	Rated ripple current (mArms)	Case φD×L (mm)	Casing symbol	Impedance (Ω max.)	Rated ripple current (mArms)	Case φD×L (mm)	Casing symbol	Impedance (Ω max.)	Rated ripple current (mArms)
4.7	5×5.8	E61	3.0	50	—	—	—	—	—	—	—	—
10	6.3×5.8	F61	1.5	80	6.3×7.7	F80	2.4	60	—	—	—	—
22	6.3×7.7	F80	1.2	120	8×10	G10	0.90	130	8×10	G10	1.30	130
33	8×10	G10	0.65	250	8×10	G10	0.90	130	10×10	H10	0.70	200
47	8×10	G10	0.65	250	10×10	H10	0.50	200	—	—	—	—
68	8×10	G10	0.65	250	—	—	—	—	—	—	—	—
100	10×10	H10	0.35	400	12.5×13.5	IE	0.18	550	—	—	—	—
	12.5×13.5	IE	0.16	600								
220	12.5×13.5	IE	0.16	600	—	—	—	—	—	—	—	—

(Note) Rated ripple current : 105℃, 100kHz
Impedance : 20℃, 100kHz