RVJ VERTICAL CHIP TYPE ALUMINUM ELECTROLYTIC CAPACITORS

ELNA®

Chip Type, 105˚C Use, Large Capacitance Capacitors

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

- Compatible with surface mounting.
- Supplied with carrier taping.
- Guarantees 2000 hours at 105℃.

RVJ

↑ High temperature

RV

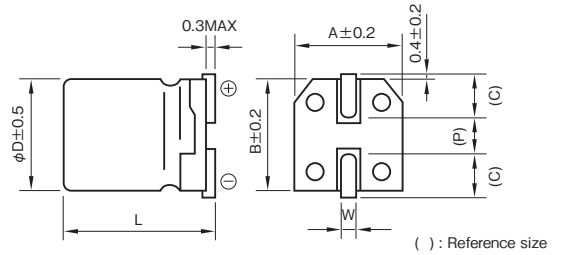
Marking color : Black print (φ8×6.5L)
White print on a brown sleeve (φ8×10L . φ10×10L)

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 / 100 tanδ (max.): 0.30 / 0.24 / 0.22 / 0.16 / 0.13 / 0.12 / 0.11 / 0.10 (20℃,120Hz)
Characteristics at high and low temperature	Rated voltage (V): 6.3 / 10 / 16 / 25 / 35 / 50 / 63 / 100 Impedance ratio (max.) Z−25℃/Z+20℃: 4 / 3 / 2 / 2 / 2 / 2 / 2 / 2 Z−40℃/Z+20℃: 8 / 5 / 4 / 3 / 3 / 3 / 3 / 3 (120Hz)
Endurance (105℃) (Applied ripple current)	Test time: 2000 hours Leakage current: The initial specified value or less Percentage of capacitance change: Within ±20% of initial value Tangent of the loss angle: 200% or less of the initial specified value
Shelf life (105℃)	Test time : 1000 hours ; other items are the same as those for the endurance. Voltage application treatment : According to JIS C5101-1
Applicable standards	JIS C5101-1, -18 1998 (IEC 60384-1 1992, -18 1993)

Outline Drawing

Unit : mm



( ) : Reference size

φD	L	A	B	C	W	P	Casing symbol
8	6.5±0.3	8.4	8.4	3.4	0.5 to 0.8	2.3	G68
8	10±0.5	8.4	8.4	3.0	0.7 to 1.1	3.1	G10
10	10±0.5	10.4	10.4	3.3	0.7 to 1.1	4.7	H10

- Soldering conditions are described on page 11.
- Land pattern size are described on page 12.
- The taping specifications are described on page 13.

Coefficient of Frequency for Rated Ripple Current

Rated voltage (V) \ Frequency (Hz)	50・60	120	1k	10k・100k
6.3 to 16	0.80	1	1.15	1.25
25 to 35	0.80	1	1.25	1.40
50 to 63	0.80	1	1.35	1.50
100	0.70	1	1.35	1.50

Part numbering system (example : 16V470μF)

RVJ	—	16	V	471	M	H10	□	U—	□
Series code		Rated voltage symbol		Rated capacitance symbol	Capacitance tolerance symbol	Casing symbol	Additional symbol		Taping symbol

Standard Ratings

Rated voltage (V) / Item / Rated capacitance (μF)	6.3				10				16				25				35				50				63				100			
	Case φD (mm)	Casing symbol	ESR Ω	Rated ripple current mArms	Case φD (mm)	Casing symbol	ESR Ω	Rated ripple current mArms	Case φD (mm)	Casing symbol	ESR Ω	Rated ripple current mArms	Case φD (mm)	Casing symbol	ESR Ω	Rated ripple current mArms	Case φD (mm)	Casing symbol	ESR Ω	Rated ripple current mArms	Case φD (mm)	Casing symbol	ESR Ω	Rated ripple current mArms	Case φD (mm)	Casing symbol	ESR Ω	Rated ripple current mArms	Case φD (mm)	Casing symbol	ESR Ω	Rated ripple current mArms
10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8×10	G10	16.6	67
22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8×6.5	G68	9.1	110	8×10	G10	8.3	99	10×10	H10	7.5	133
33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8×6.5	G68	6.5	110	8×10	G10	6.0	178	10×10	H10	5.5	160	10×10	H10	5.0	133
47	—	—	—	—	—	—	—	—	—	—	—	—	8×6.5	G68	5.7	110	8×6.5 8×10	G68 G10	4.6 4.6	110 178	8×10	G10	4.2	178	10×10	H10	3.9	160	—	—	—	—
100	—	—	—	—	8×6.5	G68	4.3	110	8×6.5 8×10	G68 G10	3.6	110 178	8×10	G10	2.7	178	10×10	H10	2.2	324	8×10 10×10	G10 H10	2.0 2.0	178 324	—	—	—	—	—	—	—	—
220	8×10	G10	2.3	178	8×10	G10	2.0	178	10×10	H10	1.7	324	10×10	H10	1.2	324	10×10	H10	0.98	324	—	—	—	—	—	—	—	—	—	—	—	—
330	8×10	G10	1.5	178	10×10	H10	1.3	324	10×10	H10	1.1	324	10×10	H10	0.80	324	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
470	10×10	H10	1.0	324	10×10	H10	0.92	324	10×10	H10	0.78	324	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1000	10×10	H10	0.50	324	10×10	H10	0.40	324	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

(Note) Rated ripple current : 105℃, 120Hz ; ESR : 20℃, 120Hz

NOTE
Design, Specifications are subject to change without notice.
Ask factory for technical specifications before purchase and/or use.

Chip Type, 105˚C Use, Large Capacitance Capacitors

SMD | 105˚C 5000hours | Anti-cleaning solvent

- Surface mount device.
- Supplied with taping.
- Guarantees 5000 hours at 105°C.

RVJ (large)

High temperature

RV (large)

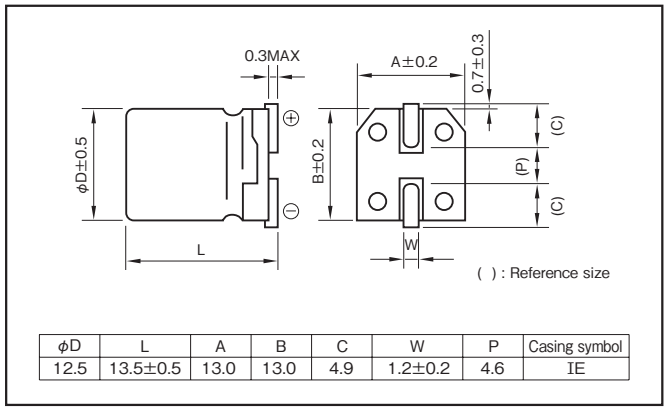
Marking color : White print on a brown sleeve

Specifications

Item	Performance
Category temperature range (˚C)	−55 to +105
Tolerance at rated capacitance (%)	±20 (20˚C,120Hz)
Leakage current (μA)	Less than 0.01CV (after 2 minutes) C : Rated capacitance (μF) ; V : Rated voltage (V) (20˚C)
Tangent of loss angle (tanδ)	Rated voltage (V): 6.3 / 10 / 16 / 25 / 35 / 50 / 63 / 100 tanδ (max.): 0.30 / 0.26 / 0.22 / 0.16 / 0.13 / 0.12 / 0.11 / 0.10 0.02 is added to every 1000μF increase over 1000μF. (20˚C,120Hz)
Characteristics at high and low temperature	Rated voltage (V): 6.3 / 10 / 16 / 25 / 35 / 50 / 63 / 100 Impedance ratio (max.) Z−25˚C/Z+20˚C: 4 / 3 / 2 / 2 / 2 / 2 / 2 / 2 Impedance ratio (max.) Z−40˚C/Z+20˚C: 8 / 5 / 4 / 3 / 3 / 3 / 3 / 3 (120Hz)
Endurance (105˚C) (Applied ripple current)	Test time: 5000 hours Leakage current: The initial specified value or less Percentage of capacitance change: Within ±20% of initial value Tangent of the loss angle: 200% or less of the initial specified value
Shelf life (105˚C)	Test time : 1000 hours ; other items are the same as those for the endurance. Voltage application treatment : According to JIS C5101-1
Applicable standards	JIS C5101-1, -18 1998 (IEC 60384-1 1992, -18 1993)

Outline Drawing

Unit : mm



φD	L	A	B	C	W	P	Casing symbol
12.5	13.5±0.5	13.0	13.0	4.9	1.2±0.2	4.6	IE

- Soldering conditions are described on page 11.
- Land pattern size are described on page 12.
- The taping specifications are described on page 13.

Coefficient of Frequency for Rated Ripple Current

Frequency (Hz) / Rated capacitance (μF)	120	1k	10k	100k
47	0.50	0.76	0.87	1
100 to 220	0.70	0.85	0.90	1
330 to 1000	0.80	0.93	0.98	1

Part numbering system (example : 10V1000μF)

RVJ	—	10	V	102	M	IE	□	T	—	R5
Series code		Rated voltage symbol		Rated capacitance symbol	Capacitance tolerance symbol	Casing symbol	Additional symbol			Taping symbol

Standard Ratings

Rated voltage (V) / Item / Rated capacitance (μF)	6.3				10				16				25				35				50				63				100			
	Case φD (mm)	Casing symbol	Imp. Ω	Rated ripple current mArms	Case φD (mm)	Casing symbol	Imp. Ω	Rated ripple current mArms	Case φD (mm)	Casing symbol	Imp. Ω	Rated ripple current mArms	Case φD (mm)	Casing symbol	Imp. Ω	Rated ripple current mArms	Case φD (mm)	Casing symbol	Imp. Ω	Rated ripple current mArms	Case φD (mm)	Casing symbol	Imp. Ω	Rated ripple current mArms	Case φD (mm)	Casing symbol	Imp. Ω	Rated ripple current mArms	Case φD (mm)	Casing symbol	Imp. Ω	Rated ripple current mArms
47	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	12.5×13.5	IE	0.26	475
100	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	12.5×13.5	IE	0.176	577	–	–	–	–
220	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	12.5×13.5	IE	0.136	655	–	–	–	–	–	–	–	–
330	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	12.5×13.5	IE	0.105	747	–	–	–	–	–	–	–	–	–	–	–	–
470	–	–	–	–	–	–	–	–	–	–	–	–	12.5×13.5	IE	0.105	747	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
1000	12.5×13.5	IE	0.105	747	12.5×13.5	IE	0.105	747	12.5×13.5	IE	0.105	747	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

(Note) Rated ripple current : 105˚C, 100kHz ; Impedance(Imp.) : 20˚C, 100kHz

NOTE
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