RV5 VERTICAL CHIP TYPE ALUMINUM ELECTROLYTIC CAPACITORS

ELNA®

Chip Type 85°C High CV Capacitors

GREEN CAP | SMD | Anti-cleaning solvent

- Compatible with surface mounting.
- Supplied with carrier taping.
- Guarantees 2000 hours at 85°C.

High CV

RV5 ⇦ RV3

Marking color : Black print

Specifications

Item	Performance
Category temperature range (℃)	−40 to +85
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)	4	6.3	10	16	25	35	50	63	100
tanδ (max.)	Refer to following page.								

(20℃,120Hz)

Characteristics at high and low temperature

Rated voltage (V)		4	6.3	10	16	25	35	50	63	100
Impedance ratio (max.)	Z−25℃/Z+20℃	7	4	3	2	2	2	2	2	2
	Z−40℃/Z+20℃	17	10	8	6	4	3	3	3	3

(120Hz)

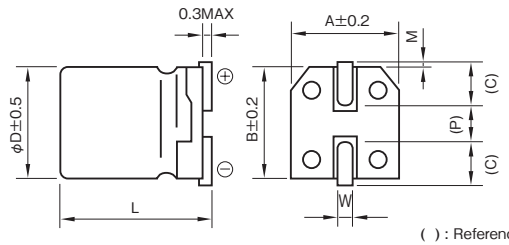
Endurance (85℃) (Applied ripple current)

Test time	2000 hours (φ3 : 1000 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

Shelf life (85℃)	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 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
3	5.3±0.2	3.3	3.3	1.5	0.4±0.2	0.45 to 0.75	0.8	B55
4	5.3±0.2	4.3	4.3	2.0	0.4±0.2	0.5 to 0.8	1.0	D55
5	5.3±0.2	5.3	5.3	2.3	0.4±0.2	0.5 to 0.8	1.5	E55
6.3	5.3±0.2	6.3	6.3	2.7	0.4±0.2	0.5 to 0.8	2.0	F55
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
10	10±0.5	10.4	10.4	3.3	0.4±0.2	0.7 to 1.1	4.7	H10
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 13.
- Land pattern size are described on page 11.
- The taping spesifications are described on page 14.

Coefficient of Frequency for Rated Ripple Current

Rated voltage (V) \ Frequency (Hz)	50・60	120	1k	10k・100k
4 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)

RV5	—	16	V	471	M	G10	U —	⬚
Series code		Rated voltage symbol		Rated capacitance symbol	Capacitance tolerance symbol	Casing symbol		Taping symbol

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)	4				6.3				10				16				25			
	Case φD×L (mm)	Casing symbol	tan δ	Rated ripple current (mArms)	Case φD×L (mm)	Casing symbol	tan δ	Rated ripple current (mArms)	Case φD×L (mm)	Casing symbol	tan δ	Rated ripple current (mArms)	Case φD×L (mm)	Casing symbol	tan δ	Rated ripple current (mArms)	Case φD×L (mm)	Casing symbol	tan δ	Rated ripple current (mArms)
4.7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3×5.3	B55	0.16	11
10	–	–	–	–	–	–	–	–	4×5.3	D55	0.24	23	3×5.3	B55	0.22	18	3×5.3	B55	0.18	16
													4×5.3	D55	0.20	26	4×5.3	D55	0.18	23
22	3×5.3	B55	0.42	14	3×5.3	B55	0.35	21	3×5.3	B55	0.32	20	4×5.3	D55	0.28	30	4×5.3	D55	0.18	24
					4×5.3	D55	0.28	31	4×5.3	D55	0.24	26	5×5.3	E55	0.20	44	5×5.3	E55	0.18	43
33	4×5.3	D55	0.42	31	4×5.3	D55	0.35	28	4×5.3	D55	0.32	32	4×5.3	D55	0.28	32	5×5.3	E55	0.18	54
					5×5.3	E55	0.28	44	5×5.3	E55	0.24	48	5×5.3	E55	0.28	44	6.3×5.3	F55	0.14	67
47	4×5.3	D55	0.42	37	4×5.3	D55	0.35	34	4×5.3	D55	0.32	33	5×5.3	E55	0.28	52	6.3×5.3	F55	0.18	75
					5×5.3	E55	0.28	52	5×5.3	E55	0.32	54	6.3×5.3	F55	0.20	75				
100	5×5.3	E55	0.42	63	5×5.3	E55	0.35	58	5×5.3	E55	0.32	54	6.3×5.3	F55	0.20	70	6.3×7.7	F80	0.18	124
					6.3×5.3	F55	0.28	89	6.3×5.3	F55	0.24	98					8×6.5	G68	0.18	118
150	–	–	–	–	6.3×5.3	F55	0.35	83	6.3×5.3	F55	0.32	79	6.3×7.7	F80	0.28	109	–	–	–	–
									6.3×7.7	F80	0.32	98								
220	6.3×5.3	F55	0.42	110	6.3×5.3	F55	0.35	88	6.3×7.7	F80	0.32	173	6.3×7.7	F80	0.28	162	8×10	G10	0.14	252
					6.3×7.7	F80	0.35	113	8×6.5	G68	0.32	175	8×10	G10	0.20	220				
330	–	–	–	–	6.3×7.7	F80	0.35	188	8×10	G10	0.24	230	8×10	G10	0.20	260	8×10	G10	0.18	300
					8×6.5	G68	0.35	190									10×10	H10	0.14	458
470	–	–	–	–	8×10	G10	0.28	262	8×10	G10	0.32	310	8×10	G10	0.28	307	10×10	H10	0.14	458
													10×10	H10	0.20	458				
680	–	–	–	–	–	–	–	–	–	–	–	–	10×10	H10	0.28	380	–	–	–	–
820	–	–	–	–	8×10	G10	0.35	320	–	–	–	–	–	–	–	–	12.5×13.5	IE	0.14	552
1000	–	–	–	–	10×10	H10	0.28	458	10×10	H10	0.24	454	12.5×13.5	IE	0.20	521	–	–	–	–
1500	–	–	–	–	10×10	H10	0.35	489	12.5×13.5	IE	0.24	560	–	–	–	–	–	–	–	–
2200	–	–	–	–	12.5×13.5	IE	0.28	651	–	–	–	–	–	–	–	–	–	–	–	–

Rated voltage(V) / Item / Rated capacitance(μF)	35				50				63				100			
	Case φD×L (mm)	Casing symbol	tan δ	Rated ripple current (mArms)	Case φD×L (mm)	Casing symbol	tan δ	Rated ripple current (mArms)	Case φD×L (mm)	Casing symbol	tan δ	Rated ripple current (mArms)	Case φD×L (mm)	Casing symbol	tan δ	Rated ripple current (mArms)
0.22	–	–	–	–	3×5.3	B55	0.12	2	–	–	–	–	–	–	–	–
					4×5.3	D55	0.10	5								
0.33	–	–	–	–	3×5.3	B55	0.12	3	–	–	–	–	–	–	–	–
					4×5.3	D55	0.10	6								
0.47	–	–	–	–	3×5.3	B55	0.12	4	–	–	–	–	–	–	–	–
					4×5.3	D55	0.10	7								
1	–	–	–	–	3×5.3	B55	0.12	6	–	–	–	–	–	–	–	–
					4×5.3	D55	0.10	10								
2.2	3×5.3	B55	0.14	8	3×5.3	B55	0.12	9	–	–	–	–	–	–	–	–
					4×5.3	D55	0.10	15								
3.3	3×5.3	B55	0.14	9	3×5.3	B55	0.12	10	4×5.3	D55	0.12	12	–	–	–	–
					4×5.3	D55	0.10	19								
4.7	3×5.3	B55	0.14	13	4×5.3	D55	0.12	20	5×5.3	E55	0.12	20	–	–	–	–
	4×5.3	D55	0.12	20	5×5.3	E55	0.10	26								
10	4×5.3	D55	0.14	27	5×5.3	E55	0.12	34	6.3×5.3	F55	0.12	32	8×10	G10	0.10	94
	5×5.3	E55	0.12	34	6.3×5.3	F55	0.10	44								
22	5×5.3	E55	0.14	47	6.3×5.3	F55	0.12	47	6.3×7.7	F80	0.12	60	8×10	G10	0.12	139
	6.3×5.3	F55	0.12	59					8×6.5	G68	0.12	62				
33	6.3×5.3	F55	0.14	67	6.3×7.7	F80	0.12	82	8×10	G10	0.10	139	8×10	G10	0.12	94
					8×6.5	G68	0.12	83					10×10	H10	0.10	189
47	6.3×5.3	F55	0.14	54	6.3×7.7	F80	0.12	85	8×10	G10	0.10	139	10×10	H10	0.12	189
	6.3×7.7	F80	0.14	90	8×10	G10	0.10	252	10×10	H10	0.12	226				
100	6.3×7.7	F80	0.14	120	8×10	G10	0.12	252	10×10	H10	0.10	226	12.5×13.5	IE	0.10	242
					10×10	H10	0.10	458								
220	8×10	G10	0.14	260	–	–	–	–	12.5×13.5	IE	0.10	343	–	–	–	–
	10×10	H10	0.12	458												
330	10×10	H10	0.14	360	12.5×13.5	IE	0.10	451	–	–	–	–	–	–	–	–
470	12.5×13.5	IE	0.12	451	–	–	–	–	–	–	–	–	–	–		–

(Note) Rated ripple current : 85° C, 120Hz