

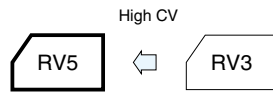
Chip Type 85°C High CV Capacitors

GREEN CAP

SMD

Anti-cleaning solvent

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



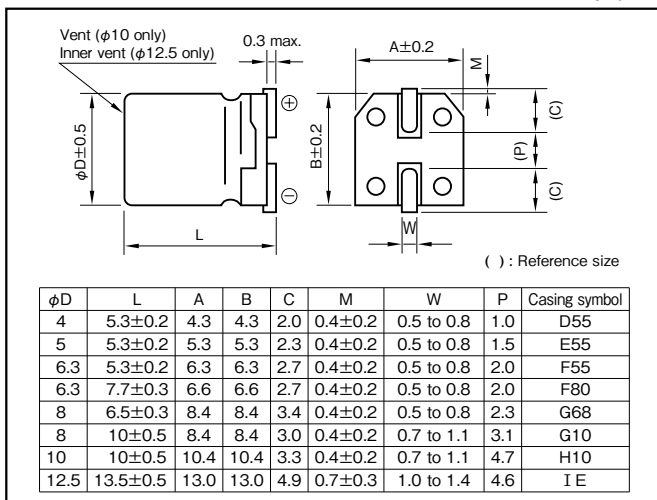
Marking color : Black print (φ4 — φ8, φ12.5)
White print on a brown sleeve (φ10)

Specifications

Item	Performance									
Category temperature range (°C)	-40 to +85									
Tolerance at rated capacitance (%)	±20 (20°C, 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°C)									
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°C, 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°C/Z+20°C	7	4	3	2	2	2	2	2
		Z-40°C/Z+20°C	17	10	8	6	4	3	3	3
Endurance (85°C) (Applied ripple current)	Test time	2000 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°C)	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



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

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

φ10 or less (example : 16V470μF)

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

φ12.5 (example : 10V1500μF)

RV5	—	10	V	152	M	IE	T	—	R5
Series code		Rated voltage symbol		Rated capacitance symbol	Capacitance tolerance symbol	Casing symbol			Taping symbol

Standard Ratings

Rated voltage(V) 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)
10	-	-	-	-	-	-	-	-	4×5.3	D55	0.24	23	4×5.3	D55	0.20	26	4×5.3	D55	0.18	23
22	-	-	-	-	4×5.3	D55	0.28	31	4×5.3	D55	0.24	26	4×5.3	D55	0.28	30	4×5.3	D55	0.18	24
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	0.20	44
					5×5.3	E55	0.28	44	5×5.3	E55	0.24	48	5×5.3	E55	0.28	44	5×5.3	E55	0.18	43
47	4×5.3	D55	0.42	37	4×5.3	D55	0.35	34	4×5.3	D55	0.32	33	4×5.3	D55	0.28	32	5×5.3	E55	0.28	54
					5×5.3	E55	0.28	52	5×5.3	E55	0.32	54	6.3×5.3	F55	0.20	75	6.3×5.3	F55	0.18	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	6.3×5.3	F55	0.20	70	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	-	-	-	-
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	8×10	G10	0.18	300
330	-	-	-	-	6.3×7.7	F80	0.35	188	8×10	G10	0.24	230	8×10	G10	0.20	260	10×10	H10	0.14	458
					8×6.5	G68	0.35	190	10×10	H10	0.24	230	10×10	H10	0.20	260	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
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	0.30	651	-	-	-	-	-	-	-	-	-	-	-	-

ALUMINUM

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CHIP

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85°C

Rated voltage(V) 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	-	-	-	-	4×5.3	D55	0.10	5	-	-	-	-	-	-	-	-
0.33	-	-	-	-	4×5.3	D55	0.10	6	-	-	-	-	-	-	-	-
0.47	-	-	-	-	4×5.3	D55	0.10	7	-	-	-	-	-	-	-	-
1	-	-	-	-	4×5.3	D55	0.10	10	-	-	-	-	-	-	-	-
2.2	-	-	-	-	4×5.3	D55	0.10	15	-	-	-	-	-	-	-	-
3.3	-	-	-	-	4×5.3	D55	0.10	19	4×5.3	D55	0.12	12	-	-	-	-
4.7	4×5.3	D55	0.12	20	4×5.3	D55	0.12	20	5×5.3	E55	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	8×10	G10	0.12	94
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	94
									8×6.5	G68	0.12	62	10×10	H10	0.10	189
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	10×10	H10	0.12	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	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