

Chip Type, 105°C Use, Large Capacitance Capacitors

GREEN CAP

SMD

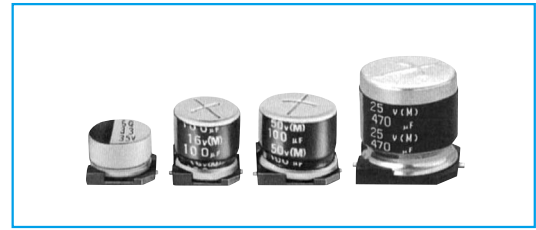
105°C
2000hours

Anti-cleaning solvent

- Compatible with surface mounting.
- Supplied with carrier taping.
- Guarantees 2000 hours at 105°C.
($\phi 12.5 \times 13.5L$: 5000 hours at 105°C)



High temperature



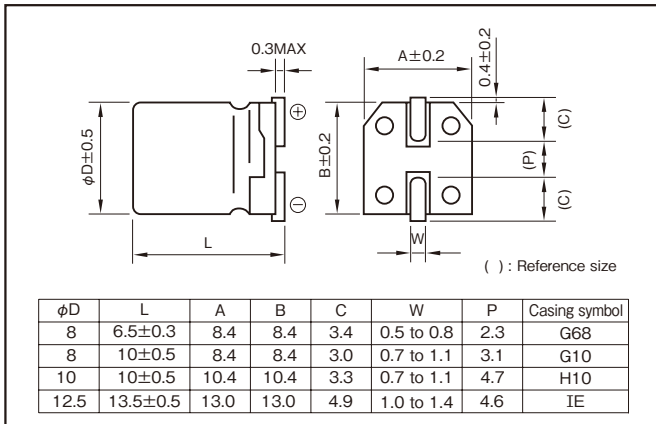
Marking color : Black print ($\phi 8 \times 6.5L$)
White print on a brown sleeve ($\phi 8 \times 10L - \phi 12.5 \times 13.5L$)

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 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)	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	
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
		Z-40°C/Z+20°C	8	5	4	3	3	3	3	3
Endurance (105°C) (Applied ripple current)	Test time	2000 hours ($\phi 12.5 \times 13.5L$: 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 C 5101-1 1998, -18 1999 (IEC 60384-1 1992, -18 1993)									

Outline Drawing

Unit : mm



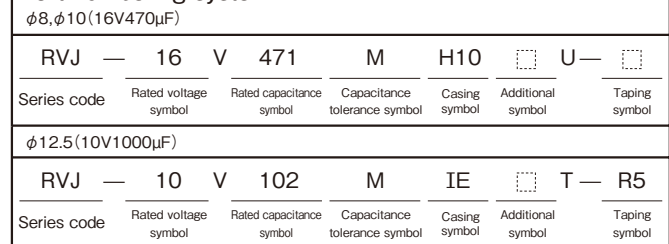
- Soldering conditions are described on page 11.
- Land pattern size are described on page 12.
- The taping specifications are described on page 13.

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

Rated capacitance(μF)	Frequency (Hz)			
	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



Standard Ratings

Rated capacitance (μF)	6.3		10		16		25		35		50		63		100	
	Case	Rated ripple current	Case	Rated ripple current	Case	Rated ripple current	Case	Rated ripple current	Case	Rated ripple current	Case	Rated ripple current	Case	Rated ripple current	Case	Rated ripple current
10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
47	—	—	—	—	—	—	—	—	8×6.5	G68	110	—	—	—	—	—
	—	—	—	—	—	—	—	—	8×10	G10	178	8×10	G10	178	10×10	H10
100	—	—	8×6.5	G68	110	—	—	—	8×10	G10	178	8×10	G10	178	10×10	H10
	—	—	—	—	—	—	—	—	10×10	H10	324	10×10	H10	324	12.5×13.5	IE
220	8×10	G10	178	8×10	G10	178	10×10	H10	324	10×10	H10	324	12.5×13.5	IE	655*	—
330	8×10	G10	178	10×10	H10	324	10×10	H10	324	10×10	H10	324	12.5×13.5	IE	747*	—
470	10×10	H10	324	10×10	H10	324	10×10	H10	324	12.5×13.5	IE	747*	12.5×13.5	IE	747*	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1000	10×10	H10	324	10×10	H10	324	—	—	—	—	—	—	—	—	—	—
	12.5×13.5	IE	747*	12.5×13.5	IE	747*	—	—	—	—	—	—	—	—	—	—

(Note) Rated ripple current : 105°C, 120Hz
(Note*) Rated ripple current : 105°C, 100kHz

NOTE

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