

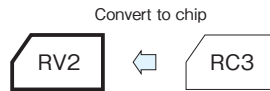
ChipType Standard Capacitors (height:5.5mm)

GREEN CAP

SMD

Anti-cleaning solvent

- Compatible with surface mounting for 5.5mm high capacitors.
- Supplied with carrier taping.
- Guarantees 2000 hours at 85°C.

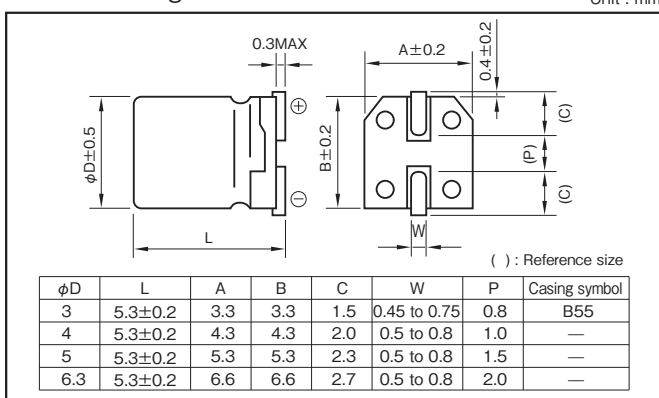


Marking color : Black print

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		
tanδ (max.)	φ3	0.42	0.30	0.24	0.22	0.16	0.14	0.12		
	φ4 to φ6.3	0.42	0.28	0.24	0.20	0.14	0.12	0.10		
Characteristics at high and low temperature	Rated voltage(V)									
	Impedance ratio (max.)	φ3	Z-25°C/Z+20°C	4	6.3	10	16	25	35	50
			Z-40°C/Z+20°C	7	4	3	2	2	2	2
	φ4 to φ6.3	Z-25°C/Z+20°C	7	3	3	2	2	2	2	
Z-40°C/Z+20°C		15	8	5	4	3	3	3		
Endurance (85°C) (Applied ripple current)	Test time		2000 hours (φ3 : 1000 hours)							
	Leakage current		The initial specified value or less							
	Percentage of capacitance change		Within ±20% of initial value (4WV : ±30%)							
	Tangent of the loss angle		200% or less of the initial specified value (4WV : 300%)							
Shelf life (85°C)	Test time : 1000hours ; 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

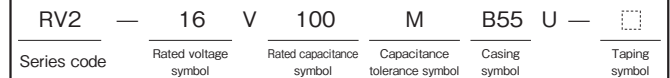


Coefficient of Frequency for Rated Ripple Current

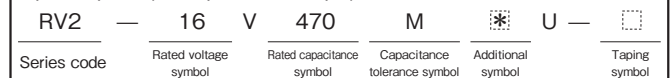
Rated voltage (V)	Frequency (Hz)			
	50 · 60	120	1k	10k · 100k
4 to 16	0.80	1	1.15	1.25
25 to 35	0.80	1	1.25	1.40
50	0.80	1	1.35	1.50

Part numbering system

• φ3 (example : 16V10µF)



• φ4 to φ6.3 (example : 16V47µF)



*Should add "S", when there is a black point in standard ratings.

- Soldering conditions are described on page 13.
- Land pattern size are described on page 11.
- The taping specifications are described on page 14.

Standard Ratings

Rated voltage (V)	4				6.3				10				16				25				35				50			
	Case φD (mm)	Casing symbol	ESR (Ω)	Rated ripple current (mA)	Case φD (mm)	Casing symbol	ESR (Ω)	Rated ripple current (mA)	Case φD (mm)	Casing symbol	ESR (Ω)	Rated ripple current (mA)	Case φD (mm)	Casing symbol	ESR (Ω)	Rated ripple current (mA)	Case φD (mm)	Casing symbol	ESR (Ω)	Rated ripple current (mA)	Case φD (mm)	Casing symbol	ESR (Ω)	Rated ripple current (mA)	Case φD (mm)	Casing symbol	ESR (Ω)	Rated ripple current (mA)
0.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
22	3	B55	32	14	4	—	21	31	5	—	18	39	5	—	15	44	6.3	—	11	55	6.3	—	9.1	59	—	—	—	—
33	4	—	21	31	5	—	14	44	5	—	12	48	6.3	—	10	63	6.3	—	7.0	67	—	—	—	—	—	—	—	—
47	4	—	15	37	5	—	10	52	6.3	—	8.5	67	6.3	—	7.1	75	—	—	—	—	—	—	—	—	—	—	—	—
100	5	—	7.0	63	6.3	—	5.0	89	6.3	—	4.0	98	•6.3	—	3.3	103	—	—	—	—	—	—	—	—	—	—	—	—
220	6.3	—	3.2	110	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

(Note) Rated ripple current : 85°C, 120Hz ; ESR : 20°C, 120Hz

NOTE

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