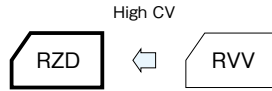


Chip Type, 105°C Use, Low ESR, High CV Capacitors

- GREEN CAP
- SMD
- Low ESR
- 105°C 2000hours
- Anti-cleaning solvent

- Compatible with surface mounting.
- Supplied with carrier taping.
- Guaranteed 2000 hours at 105°C.



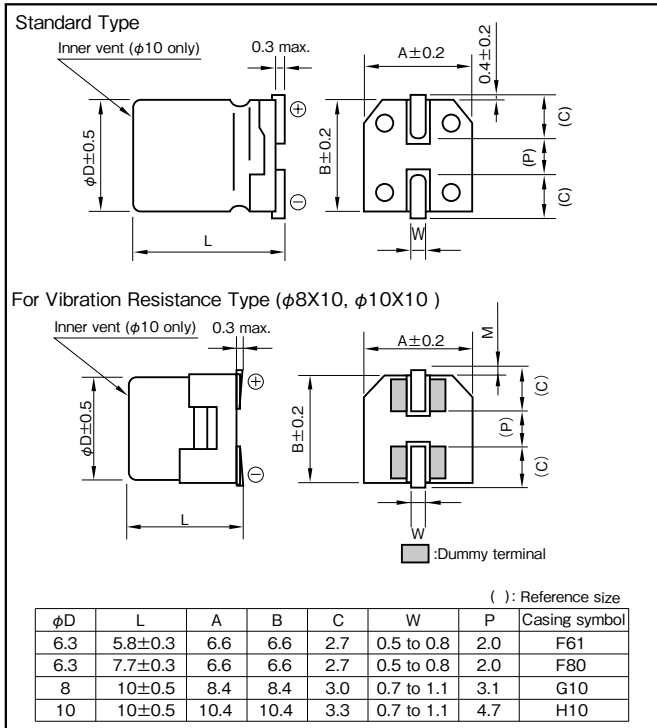
Marking color : Black print

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	80	
	tanδ (max.)	0.26	0.19	0.16	0.14	0.12	0.10	0.08	0.08	
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	80	
	Impedance ratio (max.)	Z-25°C/Z+20°C	2	2	2	2	2	2	2	2
		Z-40°C/Z+20°C	3	3	3	3	3	3	3	3
Z-55°C/Z+20°C		4	4	4	3	3	3	3	3	
(120Hz)										
Endurance (105°C)	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 (105°C)	Test time : 1000hours ; other items are same as the endurance. Voltage application treatment : According to JIS C5101-4									
Applicable standards	JIS C 5101-1 1998, -18 1999(IEC 60384-1 1992, -18 1993)									

Outline Drawing

Unit : mm



Coefficient of Frequency for Rated Ripple Current

Frequency (Hz)	50 · 60	120	1k	10k · 100k
Rated voltage (V)	50 · 60	120	1k	10k · 100k
6.3 to 80	0.50	0.50	0.75	1

Part numbering system

Standard Type (example : 35V150µF)

RZD	—	35	V	151	M	F80	U	□
Series code		Rated voltage symbol		Rated capacitance symbol	Capacitance tolerance symbol	Casing symbol		Taping symbol

For Vibration Resistance Type (example : 25V820µF)

RMD	—	25	V	821	M	H10	U	□
Series code		Rated voltage symbol		Rated capacitance symbol	Capacitance tolerance symbol	Casing symbol		Taping symbol

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

Standard Ratings

Rated voltage (V) Item Rated capacitance (μF)	6.3				10				16			
	Case	Casing symbol	ESR	Rated ripple current	Case	Casing symbol	ESR	Rated ripple current	Case	Casing symbol	ESR	Rated ripple current
	φD × L (mm)		(Ω max.)	(mArms)	φD × L (mm)		(Ω max.)	(mArms)	φD × L (mm)		(Ω max.)	(mArms)
150	—	—	—	—	—	—	—	—	6.3 × 5.8	F61	0.26	300
220	—	—	—	—	6.3 × 5.8	F61	0.26	300	6.3 × 5.8	F61	0.26	300
330	6.3 × 5.8	F61	0.26	300	6.3 × 7.7	F80	0.16	600	6.3 × 7.7	F80	0.16	600
470	6.3 × 7.7	F80	0.16	600	6.3 × 7.7	F80	0.16	600	—	—	—	—
680	6.3 × 7.7	F80	0.16	600	—	—	—	—	8 × 10	G10	0.08	850
1000	—	—	—	—	8 × 10	G10	0.08	850	10 × 10	H10	0.06	1190
1500	8 × 10	G10	0.08	850	10 × 10	H10	0.06	1190	—	—	—	—
2200	10 × 10	H10	0.06	1190	—	—	—	—	—	—	—	—

Rated voltage (V) Item Rated capacitance (μF)	25				35				50			
	Case	Casing symbol	ESR	Rated ripple current	Case	Casing symbol	ESR	Rated ripple current	Case	Casing symbol	ESR	Rated ripple current
	φD × L (mm)		(Ω max.)	(mArms)	φD × L (mm)		(Ω max.)	(mArms)	φD × L (mm)		(Ω max.)	(mArms)
47	—	—	—	—	—	—	—	—	6.3 × 5.8	F61	0.68	195
100	—	—	—	—	6.3 × 5.8	F61	0.26	300	6.3 × 7.7	F80	0.34	350
150	6.3 × 5.8	F61	0.26	300	6.3 × 7.7	F80	0.16	600	—	—	—	—
220	6.3 × 7.7	F80	0.16	600	—	—	—	—	8 × 10	G10	0.18	670
330	—	—	—	—	8 × 10	G10	0.08	850	10 × 10	H10	0.12	900
470	8 × 10	G10	0.08	850	—	—	—	—	—	—	—	—
560	—	—	—	—	10 × 10	H10	0.06	1190	—	—	—	—
820	10 × 10	H10	0.06	1190	—	—	—	—	—	—	—	—

Rated voltage (V) Item Rated capacitance (μF)	63				80			
	Case	Casing symbol	ESR	Rated ripple current	Case	Casing symbol	ESR	Rated ripple current
	φD × L (mm)		(Ω max.)	(mArms)	φD × L (mm)		(Ω max.)	(mArms)
22	6.3 × 7.7	F80	0.85	85	—	—	—	—
33	6.3 × 7.7	F80	0.85	145	—	—	—	—
47	8 × 10	G10	0.45	300	8 × 10	G10	0.68	150
68	8 × 10	G10	0.45	300	10 × 10	H10	0.45	215
100	8 × 10	G10	0.45	300	—	—	—	—
150	10 × 10	H10	0.30	430	—	—	—	—

(Note) Rated ripple current : 105°C , 100kHz
 ESR : 20°C , 100kHz