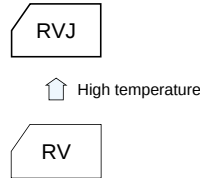


Chip Type, 105°C Use, Large Capacitance Capacitors Series RVJ

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



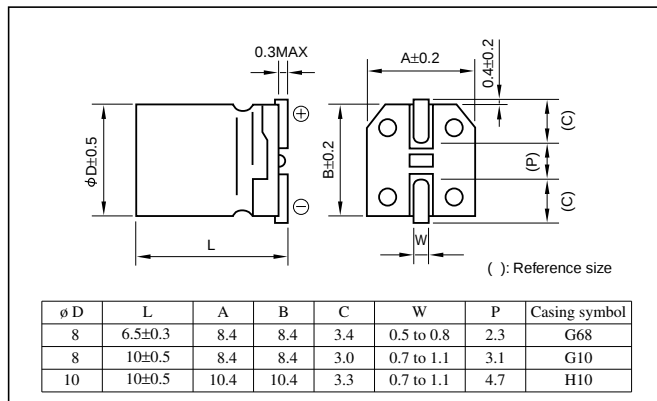
Marking color : Black print (ø8x6.5L)
White print on a brown sleeve (ø8x10L · ø10x10L)

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	(20°C, 120Hz)	
Characteristics at high and low temperature											
	Impedance ratio (max.)	Rated voltage (V)	6.3	10	16	25	35	50	63	100	
		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	(120Hz)
Endurance (105°C) (Applied ripple current)											
	Test time		2000 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 C5101-1, -18 1998 (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)				
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

Part numbering system (example: 16V470μF)

Environmental item	RVJ	16	V	471	M	H10	U	
Series code	Rated voltage symbol	Rated capacitance symbol	Capacitance tolerance symbol	Casing symbol	Additional symbol	Taping symbol		
Former item	RVJ	16	V	471	M	H10		
Series code	Rated voltage symbol	Rated capacitance symbol	Capacitance tolerance symbol	Casing symbol	Additional symbol	Taping symbol		

- Soldering conditions and land size are described on page 14.
- The taping specifications are described on page 15.

Standard Ratings

Rated voltage (V)	6.3				10				16				25				35				50				63				100				
	Case	Casing symbol	ESR	Rated ripple current	Case	Casing symbol	ESR	Rated ripple current	Case	Casing symbol	ESR	Rated ripple current	Case	Casing symbol	ESR	Rated ripple current	Case	Casing symbol	ESR	Rated ripple current	Case	Casing symbol	ESR	Rated ripple current	Case	Casing symbol	ESR	Rated ripple current	Case	Casing symbol	ESR	Rated ripple current	
	φ D(mm)		Ω	mArms	φ D(mm)		Ω	mArms	φ D(mm)		Ω	mArms	φ D(mm)		Ω	mArms	φ D(mm)		Ω	mArms	φ D(mm)		Ω	mArms	φ D(mm)		Ω	mArms	φ D(mm)		Ω	mArms	
10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8x10	G10	16.6	67	
22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8x6.5	G68	9.1	110	8x10	G10	8.3	99	10x10	H10	7.5	133	
33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8x6.5	G68	6.5	110	8x10	G10	6.0	178	10x10	H10	5.5	160	10x10	H10	5.0	133	
47	—	—	—	—	—	—	—	—	—	—	—	—	8x6.5	G68	5.7	110	8x6.5	G68	4.6	110	8x10	G10	4.2	178	10x10	H10	3.9	160	—	—	—	—	
100	—	—	—	—	8x6.5	G68	4.3	110	8x6.5	G68	3.6	110	8x10	G10	2.7	178	10x10	H10	2.2	324	8x10	G10	2.0	178	—	—	—	—	—	—	—	—	—
									8x10	G10		4.6								178	10x10	H10	2.0	324									
220	8x10	G10	2.3	178	8x10	G10	2.0	178	10x10	H10	1.7	324	10x10	H10	1.2	324	10x10	H10	0.98	324	—	—	—	—	—	—	—	—	—	—	—	—	—
330	8x10	G10	1.5	178	10x10	H10	1.3	324	10x10	H10	1.1	324	10x10	H10	0.80	324	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
470	10x10	H10	1.0	324	10x10	H10	0.92	324	10x10	H10	0.78	324	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1000	10x10	H10	0.50	324	10x10	H10	0.40	324	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

(Note) Rated ripple current : 105°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.

Chip Type, 105°C Use, Large Capacitance Capacitors Series RVJ (large)

- Surface mount device.
- Supplied with taping.
- Guarantees 5000 hours at 105°C.

RVJ
(large)

High temperature

RV
(large)

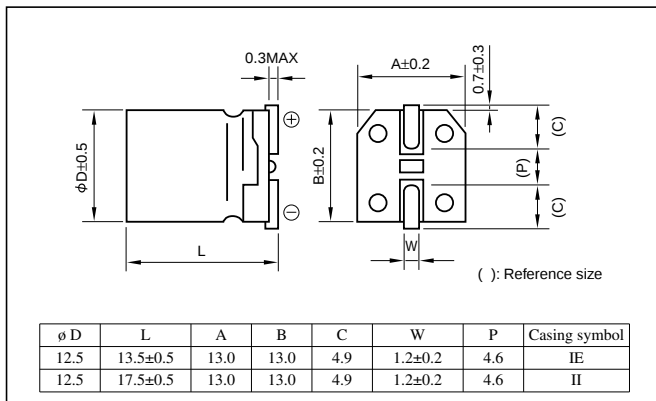
Marking color : White print on a brown sleeve

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 (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	0.26	0.22	0.16	0.13	0.12	0.11	0.10
	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	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
(120Hz)										
Endurance (105°C) (Applied ripple current)	Test time		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 C5101-1, -18 1998 (IEC 60384-1 1992, -18 1993)									

Outline Drawing

Unit: mm



Coefficient of Frequency for Rated Ripple Current

Frequency(Hz)	120	1k	10k	100k
Rated capacitance(μF)				
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 (example: 10V1000μF)

RVJ	—	10	V	102	M	IE	—	R5
Series code		Rated voltage symbol		Rated capacitance symbol	Capacitance tolerance symbol	Casing symbol		Taping symbol

- Soldering conditions and land size are described on page 14.
- The taping specifications are described on page 15.

Standard Ratings

Rated voltage (V)	6.3				10				16				25				35				50				63				100			
	Case	Casing symbol	Imp.	Rated ripple current	Case	Casing symbol	Imp.	Rated ripple current	Case	Casing symbol	Imp.	Rated ripple current	Case	Casing symbol	Imp.	Rated ripple current	Case	Casing symbol	Imp.	Rated ripple current	Case	Casing symbol	Imp.	Rated ripple current	Case	Casing symbol	Imp.	Rated ripple current	Case	Casing symbol	Imp.	Rated ripple current
Rated capacitance (μF)	φ D(mm)		Ω	mArms	φ D(mm)		Ω	mArms	φ D(mm)		Ω	mArms	φ D(mm)		Ω	mArms	φ D(mm)		Ω	mArms	φ D(mm)		Ω	mArms	φ D(mm)		Ω	mArms	φ D(mm)		Ω	mArms
47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
220	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
330	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
470	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1000	12.5x13.5	IE	0.105	747	12.5x13.5	IE	0.105	747	12.5x13.5	IE	0.105	747	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

(Note) Rated ripple current : 105°C, 120Hz ; Impedance(Imp.) : 20°C, 100kHz

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