

Chip Type, 105°C Use, Low ESR Capacitors

GREEN
CAP

SMD

Low
ESR

105°C
5000hours

Anti-
cleaning
solvent

- Compatible with surface mounting.
- Supplied with carrier taping.
- Guarantees 5000 hours at 105°C.
($\phi 8 \times 6.5L$ or less : 1000hours)
($\phi 8 \times 10L$ to $\phi 10$: 2000hours)



Miniaturized
Low ESR



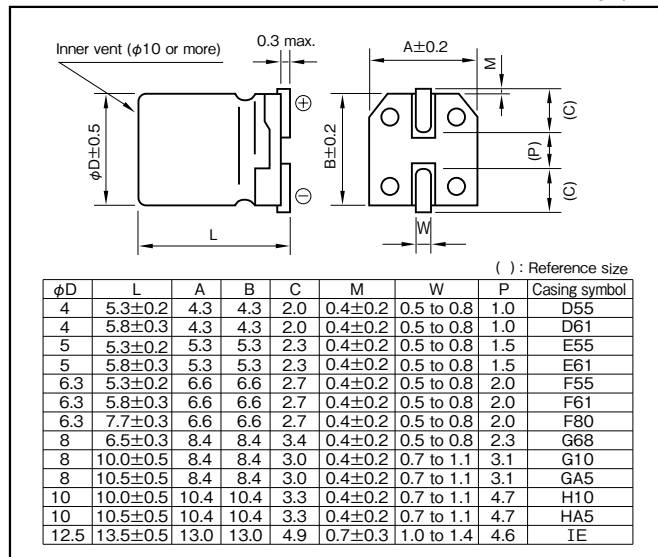
Marking color : Black print

Specifications

Item	Performance																													
Category temperature range (°C)	-55 to +105																													
Tolerance at rated capacitance (%)	±20 (20°C,120Hz)																													
Leakage current (μA) (max.)	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)	<table><tr><td>Rated voltage (V)</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td></tr><tr><td>tanδ (max.)</td><td>0.28</td><td>0.24</td><td>0.20</td><td>0.16</td><td>0.14</td></tr></table>						Rated voltage (V)	6.3	10	16	25	35	tanδ (max.)	0.28	0.24	0.20	0.16	0.14												
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	tanδ (max.)	0.28	0.24	0.20	0.16	0.14																								
0.02 is added to every 1000μF increase over 1000μF. (20°C,120Hz)																														
Characteristics at high and low temperature	<table><tr><td>Rated voltage (V)</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td></tr><tr><td rowspan="2">Impedance ratio (max.)</td><td>Z-25°C/Z+20°C</td><td>4</td><td>3</td><td>2</td><td>2</td></tr><tr><td>Z-55°C/Z+20°C</td><td>8</td><td>5</td><td>4</td><td>3</td></tr></table>						Rated voltage (V)	6.3	10	16	25	35	Impedance ratio (max.)	Z-25°C/Z+20°C	4	3	2	2	Z-55°C/Z+20°C	8	5	4	3							
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(120Hz)																														
Endurance (105°C) (Applied ripple current)	<table><tr><td>Test time</td><td colspan="5">1000 hours (φ8×6.5L or less) 2000 hours (φ8×10L to φ10) 5000 hours (φ12.5)</td></tr><tr><td>Leakage current</td><td colspan="5">The initial specified value or less</td></tr><tr><td>Percentage of capacitance change</td><td colspan="5">Within ±25% of initial value</td></tr><tr><td>Tangent of the loss angle</td><td colspan="5">200% or less of initial specified value</td></tr></table>						Test time	1000 hours (φ8×6.5L or less) 2000 hours (φ8×10L to φ10) 5000 hours (φ12.5)					Leakage current	The initial specified value or less					Percentage of capacitance change	Within ±25% of initial value					Tangent of the loss angle	200% or less of initial specified value				
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Shelf life (105°C)	Test time : 1000hours ; other items are same as the endurance. Voltage application treatment : According to JIS C5101-4 4.1																													
Applicable standards	JIS C5101 - 1,- 18 (IEC 60384 - 1,- 18)																													

Outline Drawing

Unit : mm



Refer to individual page.
(Soldering conditions, Land pattern size, The taping specifications)

Coefficient of Frequency for Rated Ripple Current

Frequency (Hz)	120	1k	10k	100k
Rated voltage (V)				
6.3 to 35	0.50	0.75	0.90	1

Part numbering system

φ8×6.5L and φ6.3 or less (example : 6.3V330µF)

RVZ	—	6	V	331	M	G68	U	—	
Series code		Rated voltage symbol		Rated capacitance symbol	Capacitance tolerance symbol	Casing symbol		Taping symbol	

φ8×10L, φ8×10.5L (example : 10V220µF)

RVZ	—	10	V	221	M	G10	Y1U	—	
Series code		Rated voltage symbol		Rated capacitance symbol	Capacitance tolerance symbol	Casing symbol		Taping symbol	

φ10 (example : 16V330µF)

RVZ	—	16	V	331	M	H10	EU	—	
Series code		Rated voltage symbol		Rated capacitance symbol	Capacitance tolerance symbol	Casing symbol		Taping symbol	

φ12.5 (example : 25V680µF)

RVZ	—	25	V	681	M	IE	T	—	R5
Series code		Rated voltage symbol		Rated capacitance symbol	Capacitance tolerance symbol	Casing symbol		Taping symbol	

- * In the case of "for High Temperature Reflow" type, a series name is "RZA". (φ4 to φ10)
- * If "For Vibration Resistance" type is required, please see the series RTZ.
- * φ8×10L - φ10×10L product have sleeve type (white print on a brown sleeve), but old type product. Please inquire for sleeve type P/N. However, we don't accept new orders.

Standard Ratings

Rated voltage (V) Rated capacitance (μF) Item	6.3				10				16				25				35			
	Case φD×L (mm)	Casing symbol	ESR (Ω max.)	Rated ripple current (mA rms)	Case φD×L (mm)	Casing symbol	ESR (Ω max.)	Rated ripple current (mA rms)	Case φD×L (mm)	Casing symbol	ESR (Ω max.)	Rated ripple current (mA rms)	Case φD×L (mm)	Casing symbol	ESR (Ω max.)	Rated ripple current (mA rms)	Case φD×L (mm)	Casing symbol	ESR (Ω max.)	Rated ripple current (mA rms)
4.7	—	—	—	—	—	—	—	—	—	—	—	—	4×5.3	D55	3.20	65	4×5.3	D55	3.20	65
10	—	—	—	—	4×5.3	D55	3.20	65	4×5.3	D55	3.20	65	4×5.8	D61	1.80	80	5×5.3	E55	1.50	110
													5×5.3	E55	1.50	110	5×5.8	E61	0.76	150
15	—	—	—	—	—	—	—	—	4×5.8	D61	1.80	80	5×5.8	E61	0.76	150	5×5.8	E61	0.76	150
22	4×5.3	D55	3.20	65	4×5.8	D61	1.80	80	5×5.3	E55	1.50	110	5×5.8	E61	0.76	150	6.3×5.3	F55	0.85	170
	4×5.8	D61	1.80	80	5×5.3	E55	1.50	110	5×5.8	E61	0.76	150	6.3×5.3	F55	0.85	170	6.3×5.3	F55	0.85	170
33	5×5.3	E55	1.50	110	5×5.3	E55	1.50	110	6.3×5.3	F55	0.85	170	6.3×5.3	F55	0.85	170	6.3×5.3	F55	0.85	170
	5×5.8	E61	0.76	150	5×5.8	E61	0.76	150	6.3×5.8	F61	0.44	230	6.3×5.8	F61	0.44	230	6.3×5.8	F61	0.44	230
47	5×5.3	E55	1.50	110	6.3×5.3	F55	0.85	170	6.3×5.3	F55	0.85	170	6.3×5.3	F55	0.85	170	6.3×5.8	F61	0.44	230
	5×5.8	E61	0.76	150	6.3×5.8	F61	0.44	230	6.3×5.8	F61	0.44	230	6.3×5.8	F61	0.44	230	6.3×7.7	F80	0.34	280
																	8×6.5	G68	0.34	280
68	6.3×5.8	F61	0.44	230	6.3×5.8	F61	0.44	230	6.3×5.8	F61	0.44	230	6.3×5.8	F61	0.44	230	6.3×7.7	F80	0.34	280
																	8×6.5	G68	0.34	280
100	6.3×5.3	F55	0.85	170	6.3×5.3	F55	0.85	170	6.3×5.3	F55	0.85	170	6.3×7.7	F80	0.34	280	8×10	G10	0.20	450
	6.3×5.8	F61	0.44	230	6.3×5.8	F61	0.44	230	6.3×5.8	F61	0.44	230	8×6.5	G68	0.34	280	8×10.5	GA5	0.17	450
150	6.3×5.8	F61	0.44	230	6.3×5.8	F61	0.44	230	6.3×7.7	F80	0.34	280	8×10	G10	0.20	450	8×10.5	GA5	0.17	450
									8×6.5	G68	0.34	280	8×10.5	GA5	0.17	450	10×10	H10	0.10	670
220	6.3×5.8	F61	0.44	230	6.3×7.7	F80	0.34	280	6.3×7.7	F80	0.34	280	8×10.5	GA5	0.17	450	8×10.5	GA5	0.17	450
	6.3×7.7	F80	0.34	280	8×6.5	G68	0.34	280	8×10	G10	0.20	450	10×10	H10	0.10	670	10×10	H10	0.10	670
330	6.3×7.7	F80	0.34	280	8×10.5	GA5	0.17	450	8×10.5	GA5	0.17	450	8×10.5	GA5	0.17	450	10×10.5	HA5	0.09	670
	8×6.5	G68	0.34	280	10×10	H10	0.10	670	10×10	H10	0.10	670	10×10	H10	0.10	670				
	8×10	G10	0.20	450																
470	8×10.5	GA5	0.17	450	8×10.5	GA5	0.17	450	8×10.5	GA5	0.17	450	10×10.5	HA5	0.09	670	12.5×13.5	IE	0.06	1100
	10×10	H10	0.10	670	10×10	H10	0.10	670	10×10	H10	0.10	670								
680	8×10.5	GA5	0.17	450	10×10.5	HA5	0.09	670	10×10.5	HA5	0.09	670	12.5×13.5	IE	0.06	1100	12.5×13.5	IE	0.06	1100
1000	8×10.5	GA5	0.17	450	10×10.5	HA5	0.09	670	12.5×13.5	IE	0.06	1100	12.5×13.5	IE	0.06	1100	—	—	—	—
	10×10	H10	0.10	670																
1500	10×10.5	HA5	0.09	670	12.5×13.5	IE	0.06	1100	12.5×13.5	IE	0.06	1100	—	—	—	—	—	—	—	—
2200	12.5×13.5	IE	0.06	1100	12.5×13.5	IE	0.06	1100	—	—	—	—	—	—	—	—	—	—	—	—
2700	12.5×13.5	IE	0.06	1100	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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