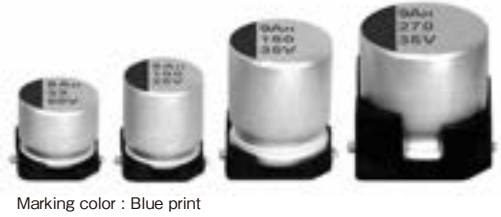
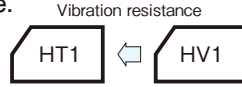


☆UPGRADE

Code in front of series have been extracted from product code, which describes the segment of products, such as type and features.

- Low ESR and high ripple current are realized.
- HT1 is resist to vibration. (30G guaranteed)
- Equivalent to conductive polymer type Aluminum Electrolytic Capacitor. (There are little characteristics change by temperature and frequency)
- Guaranteed 105°C, 10000 hours.
- Environmental : GREEN CAP™ , RoHS compliance.

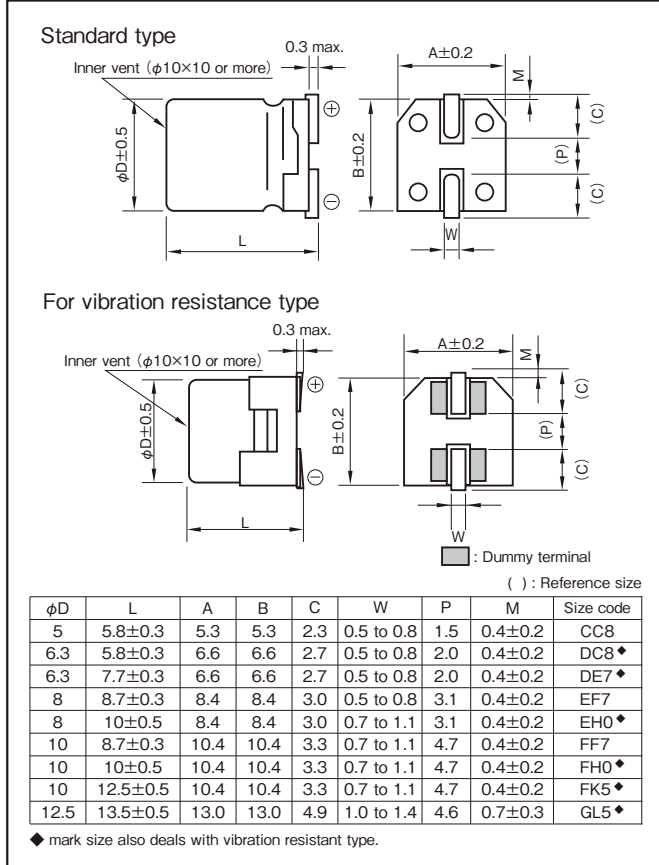


Specifications

Item	Performance																				
Category temperature range (°C)	-55 to +105																				
Tolerance at rated capacitance (%)	±20 (20°C, 120Hz)																				
Leakage current (µA) (max.)	6.3V to 80V : 0.01CV or 3 whichever is larger (after 2 minutes) 100V : 0.05CV or 15 whichever is larger (after 2 minutes), : Rated capacitance (µF) ; V : Rated voltage (V) (20°C)																				
Tangent of loss angle (tanδ)	<table border="1"> <thead> <tr> <th>Rated voltage (V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>80</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>tanδ (max.)</td> <td>0.20</td> <td>0.18</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.08</td> <td>0.08</td> <td>0.08</td> </tr> </tbody> </table> (20°C, 120Hz)	Rated voltage (V)	6.3	10	16	25	35	50	63	80	100	tanδ (max.)	0.20	0.18	0.16	0.14	0.12	0.10	0.08	0.08	0.08
Rated voltage (V)	6.3	10	16	25	35	50	63	80	100												
tanδ (max.)	0.20	0.18	0.16	0.14	0.12	0.10	0.08	0.08	0.08												
Characteristics at high and low temperature	<table border="1"> <thead> <tr> <th>Impedance ratio (max.)</th> <th>Z-25°C/Z+20°C</th> <th>1.5</th> </tr> </thead> <tbody> <tr> <td></td> <th>Z-55°C/Z+20°C</th> <td>2.0</td> </tr> </tbody> </table> (100kHz)	Impedance ratio (max.)	Z-25°C/Z+20°C	1.5		Z-55°C/Z+20°C	2.0														
Impedance ratio (max.)	Z-25°C/Z+20°C	1.5																			
	Z-55°C/Z+20°C	2.0																			
Endurance (105°C) (Applied ripple current)	<table border="1"> <tbody> <tr> <td>Test time</td> <td>10000 hours</td> </tr> <tr> <td>Leakage current</td> <td>The initial specified value or less</td> </tr> <tr> <td>Percentage of capacitance change</td> <td>Within ±30% of initial value</td> </tr> <tr> <td>Tangent of the loss angle</td> <td>200% or less of the initial specified value</td> </tr> <tr> <td>ESR change</td> <td>200% or less of the initial specified value</td> </tr> </tbody> </table>	Test time	10000 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	ESR change	200% or less of the initial specified value										
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Percentage of capacitance change	Within ±30% of initial value																				
Tangent of the loss angle	200% or less of the initial specified value																				
ESR change	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 4.1.																				

Outline Drawing

Unit : mm



Coefficient of Frequency for Rated Ripple Current

Frequency (Hz)	120	1k	10k	100k or more
Rated voltage (V)	120	1k	10k	100k or more
6.3 to 100	0.10	0.30	0.60	1

Product code system (*For general product)

φ10x8.7L or less (example : 35V150µF, Standard type)

RS*	HV1	151	M	1G	EH0	002	E
Category code	Series code	capacitance code	Cap tol. code	Voltage code	Size code	Taping and packing code	Additional code

φ10x10L, φ10x12.5L (example : 35V270µF, Standard type)

RS*	HV1	271	M	1G	FH0	002	EX
Category code	Series code	capacitance code	Cap tol. code	Voltage code	Size code	Taping and packing code	Additional code

φ12.5 (example : 35V560µF, Standard type)

RS*	HV1	561	M	1G	GL5	005	E
Category code	Series code	capacitance code	Cap tol. code	Voltage code	Size code	Taping and packing code	Additional code

- For vibration resistance type should change Series code "HV1" into "HT1".
- For details, refer to the various "Product Code System" pages.

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

NOTE : Design, Specifications are subject to change without notice.
It is recommended that you shall obtain technical specifications from ELNA to ensure that the component is suitable for your use.

Code in front of series have been extracted from product code, which describes the segment of products, such as type and features.

Standard ratings (◆Marked: It supports vibration resistance type)

Rated voltage (V) Rated capacitance (μF)	6.3 (1J)			10 (1L)			16 (1E)			25 (1T)		
	Item φD×L(mm)	ESR (mΩ max.)	Rated ripple current (mA rms)	Case φD×L(mm)	ESR (mΩ max.)	Rated ripple current (mA rms)	Case φD×L(mm)	ESR (mΩ max.)	Rated ripple current (mA rms)	Case φD×L(mm)	ESR (mΩ max.)	Rated ripple current (mA rms)
33	—	—	—	—	—	—	—	—	—	5×5.8	80	900
47	—	—	—	—	—	—	5×5.8	80	900	—	—	—
56	—	—	—	—	—	—	—	—	—	◆ 6.3×5.8	50	1300
82	—	—	—	—	—	—	◆ 6.3×5.8	45	1600	—	—	—
100	—	—	—	◆ 6.3×5.8	45	1600	—	—	—	◆ 6.3×7.7	30	2000
150	—	—	—	—	—	—	◆ 6.3×7.7	27	2200	8×8.7	27	2100
220	◆ 6.3×5.8	45	1600	◆ 6.3×7.7	24	2300	—	—	—	◆ 8×10	27	2300
270	—	—	—	—	—	—	◆ 8×10	22	2500	10×8.7	25	2400
330	◆ 6.3×7.7	24	2300	◆ 8×10	22	2500	—	—	—	◆ 10×10	20	2500
470	—	—	—	◆ 10×10	18	2600	◆ 10×10	18	2600	—	—	—
560	◆ 8×10	22	2500	—	—	—	—	—	—	◆ 10×12.5	18	3500
820	◆ 10×10	18	2600	—	—	—	—	—	—	◆ 12.5×13.5	15	4500

Rated voltage (V) Rated capacitance (μF)	35 (1G)			50 (1U)			63 (4E)			80 (1R)		
	Item φD×L(mm)	ESR (mΩ max.)	Rated ripple current (mA rms)	Case φD×L(mm)	ESR (mΩ max.)	Rated ripple current (mA rms)	Case φD×L(mm)	ESR (mΩ max.)	Rated ripple current (mA rms)	Case φD×L(mm)	ESR (mΩ max.)	Rated ripple current (mA rms)
10	—	—	—	5×5.8	120	750	◆ 6.3×5.8	120	1000	—	—	—
22	5×5.8	100	900	◆ 6.3×5.8	80	1100	◆ 6.3×7.7	80	1500	◆ 8×10	45	1550
27	—	—	—	—	—	—	8×8.7	50	1600	—	—	—
33	—	—	—	◆ 6.3×7.7	40	1600	◆ 8×10	40	1600	◆ 10×10	36	1700
47	◆ 6.3×5.8	60	1300	8×8.7	35	1700	10×8.7	35	1700	—	—	—
56	—	—	—	—	—	—	◆ 10×10	30	1800	—	—	—
68	◆ 6.3×7.7	35	2000	◆ 8×10	30	1800	—	—	—	—	—	—
82	—	—	—	10×8.7	28	1900	—	—	—	—	—	—
100	8×8.7	30	2100	◆ 10×10	28	2000	◆ 10×12.5	26	2500	—	—	—
120	—	—	—	—	—	—	◆ 12.5×13.5	22	3500	—	—	—
150	◆ 8×10	27	2300	◆ 10×12.5	24	3000	—	—	—	—	—	—
220	10×8.7	25	2400	—	—	—	—	—	—	—	—	—
270	◆ 10×10	20	2500	—	—	—	—	—	—	—	—	—
330	—	—	—	◆ 12.5×13.5	20	4000	—	—	—	—	—	—
390	◆ 10×12.5	18	3500	—	—	—	—	—	—	—	—	—
560	◆ 12.5×13.5	15	4500	—	—	—	—	—	—	—	—	—

Rated voltage (V) Rated capacitance (μF)	100 (1H)		
	Item φD×L(mm)	ESR (mΩ max.)	Rated ripple current (mA rms)
15	◆ 10×10	45	1600

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