

Conductive Polymer Hybrid Capacitors

GREEN CAP SMD Low ESR 105°C 10000hours

- Low ESR and high ripple current are realized.
- HT 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.



Marking color : Blue print



Specifications

Item	Performance														
Category temperature range (°C)	-55~+105														
Tolerance at rated capacitance (%)	±20 (20°C, 120Hz)														
Leakage current (µA)	Less than 0.01CV or 3(µA) whichever is larger (after 2 minutes) C : 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>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>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.08</td> <td>0.08</td> <td>0.08</td> </tr> </tbody> </table> <p>(20°C, 120Hz)</p>	Rated voltage (V)	25	35	50	63	80	100	tanδ (max.)	0.14	0.12	0.10	0.08	0.08	0.08
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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														

Outline Drawing

Unit : mm

Series HV

() : Reference size

φD	L	A	B	C	W	P	Casing symbol
6.3	5.8±0.3	6.6	6.6	2.7	0.5 to 0.8	2.0	F61
6.3	7.7±0.3	6.6	6.6	2.7	0.5 to 0.8	2.0	F80
8	8.7±0.3	8.4	8.4	3.0	0.5 to 0.8	3.1	G90
8	10±0.5	8.4	8.4	3.0	0.7 to 1.1	3.1	G10
10	8.7±0.3	10.4	10.4	3.3	0.7 to 1.1	4.7	H90
10	10±0.5	10.4	10.4	3.3	0.7 to 1.1	4.7	H10
10	12.5±0.5	10.4	10.4	3.3	0.7 to 1.1	4.7	HC5

Series HT

() : Reference size

φD	L	A	B	C	W	P	Casing symbol
8	10±0.5	8.4	8.4	3.0	0.7 to 1.1	3.1	G10
10	10±0.5	10.4	10.4	3.3	0.7 to 1.1	4.7	H10
10	12.5±0.5	10.4	10.4	3.3	0.7 to 1.1	4.7	HC5

■ : Dummy terminal

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

Coefficient of Frequency for Rated Ripple Current

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

Part numbering system

HV (example : 35V270µF)

HV	—	35	V	271	M	H10	E	—	□
Series code		Rated voltage symbol		Rated capacitance symbol	Capacitance tolerance symbol	Casing symbol			Taping symbol

HT (example : 35V270µF)

HT	—	35	V	271	M	H10	E	—	□
Series code		Rated voltage symbol		Rated capacitance symbol	Capacitance tolerance symbol	Casing symbol			Taping symbol

Standard Ratings

Rated voltage (V) Rated capacitance (µF)	25			35			50			63			
	Item	Case	ESR	Rated ripple current	Case	ESR	Rated ripple current	Case	ESR	Rated ripple current	Case	ESR	Rated ripple current
		φD×L (mm)	(mΩ max.)	(mArms)	φD×L (mm)	(mΩ max.)	(mArms)	φD×L (mm)	(mΩ max.)	(mArms)	φD×L (mm)	(mΩ max.)	(mArms)
10	—	—	—	—	—	—	—	—	—	—	6.3×5.8	120	1000
22	—	—	—	—	—	—	—	6.3×5.8	80	1100	6.3×7.7	80	1500
27	—	—	—	—	—	—	—	—	—	—	8×8.7	50	1600
33	—	—	—	—	—	—	—	6.3×7.7	40	1600	8×10	40	1600
47	—	—	—	6.3×5.8	60	1300	8×8.7	35	1700	10×8.7	35	1700	
56	6.3×5.8	50	1300	—	—	—	—	—	—	—	10×10	30	1800
68	—	—	—	6.3×7.7	35	2000	8×10	30	1800	—	—	—	—
82	—	—	—	—	—	—	10×8.7	28	1900	—	—	—	—
100	6.3×7.7	30	2000	8×8.7	30	2100	10×10	28	2000	10×12.5	26	2500	—
150	8×8.7	27	2100	8×10	27	2300	10×12.5	24	3000	—	—	—	—
220	8×10	27	2300	10×8.7	25	2400	—	—	—	—	—	—	—
270	10×8.7	25	2400	10×10	20	2500	—	—	—	—	—	—	—
330	10×10	20	2500	—	—	—	—	—	—	—	—	—	—
390	—	—	—	10×12.5	18	3500	—	—	—	—	—	—	—
560	10×12.5	18	3500	—	—	—	—	—	—	—	—	—	—

ALUMINUM

POLYMER HYBRID

105°C

Rated voltage (V) Rated capacitance (µF)	80			100			
	Item	Case	ESR	Rated ripple current	Case	ESR	Rated ripple current
		φD×L (mm)	(mΩ max.)	(mArms)	φD×L (mm)	(mΩ max.)	(mArms)
15	—	—	—	10×10	45	1600	—
22	8×10	45	1550	—	—	—	—
33	10×10	36	1700	—	—	—	—

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