

Conductive Polymer Hybrid Capacitors

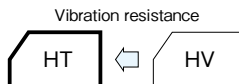
GREEN
CAP

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)	Rated voltage (V)	25	35	50	63	80	100
	tanδ (max.)	0.14	0.12	0.10	0.08	0.08	0.08
Characteristics at high and low temperature	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)	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					
Shelf life (105°C)	Test time : 1000hours : other items are same as the endurance. Voltage application treatment						

Outline Drawing

Unit : mm

Series HV								Series HT							
() : Reference size															
ϕD	L	A	B	C	W	P	Casing symbol	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	8	10±0.5	8.4	8.4	3.0	0.7 to 1.1	3.1	G10
6.3	7.7±0.3	6.6	6.6	2.7	0.5 to 0.8	2.0	F80	10	10±0.5	10.4	10.4	3.3	0.7 to 1.1	4.7	H10
8	8.7±0.3	8.4	8.4	3.0	0.5 to 0.8	3.1	G90	10	12.5±0.5	10.4	10.4	3.3	0.7 to 1.1	4.7	HC5
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								

- 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) Item Rated capacitance (μF)	25			35			50			63		
	Case	ESR	Rated ripple current	Case	ESR	Rated ripple current	Case	ESR	Rated ripple current	Case	ESR	Rated ripple current
	φ D×L (mm)	(mΩ max.)	(mA _{rms})	φ D×L (mm)	(mΩ max.)	(mA _{rms})	φ D×L (mm)	(mΩ max.)	(mA _{rms})	φ D×L (mm)	(mΩ max.)	(mA _{rms})
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	—	—	—	—	—	—	—	—	—

Rated voltage (V) Item Rated capacitance (μF)	80			100		
	Case	ESR	Rated ripple current	Case	ESR	Rated ripple current
	φ D×L (mm)	(mΩ max.)	(mA _{rms})	φ D×L (mm)	(mΩ max.)	(mA _{rms})
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

Mouser Electronics

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