



Surface mount type  
series

Low ESR, High ripple current  
Load life of 1,000h at 150°C  
Compliance with AEC-Q200



## Specifications

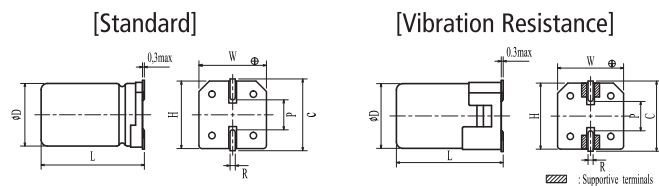
Items	Characteristics												
Category temperature range	-55 to +150°C												
Rated voltage range	25 to 80Vdc												
Capacitance range	33 to 680µF												
Capacitance tolerance	±20% [M] (at 20°C, 120Hz)												
Leakage current	I=0.01CV or 3µA whichever is greater (at 20°C, after 2 minutes)												
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> </tr> </thead> <tbody> <tr> <td>Tanδ</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.08</td> <td>0.08</td> </tr> </tbody> </table> <p style="text-align: right;">(at 20°C, 120Hz)</p>	Rated voltage(V)	25	35	50	63	80	Tanδ	0.14	0.12	0.10	0.08	0.08
Rated voltage(V)	25	35	50	63	80								
Tanδ	0.14	0.12	0.10	0.08	0.08								
ESR	Less than or equal to the value of Standard Ratings (at 20°C, 100kHz)												
Low temperature characteristics (Impedance ratio at 100kHz)	Z (-25 °C) / Z (+20 °C) ≤ 1.5 Z (-55 °C) / Z (+20 °C) ≤ 2.0												
Endurance	150°C, 1,000 hrs, apply the rated ripple current without exceeding the rated voltage												
	Capacitance change	Within±30% of the initial value											
	Tangent of loss angle (tanδ)	≤200% of the initial specified value											
	ESR(mΩ)	≤200% of the initial specified value											
	Leakage current	≤The initial specified value											
Shelf life	After storage for 1,000 hrs at 150°C with no voltage applied and then being stabilized at 20°C, capacitors shall meet the specified values for the endurance characteristics listed above.(with voltage treatment)												
	85°C, 85% RH, 2,000 hrs, rated voltage applied												
Damp Heat (Steady State)	Capacitance change	Within±30% of the initial value											
	Tangent of loss angle (tanδ)	≤200% of the initial specified value											
	ESR(mΩ)	≤200% of the initial specified value											
	Leakage current	≤The initial specified value											

## Part numbering system

Example: HVJ series, 80V / 33µF / Vibration resistant structure

80	HVJ	33	M	E	10	V
Voltage	Series	Capacitance	Tolerance	Diameter	Length	Vibration resistant structure

## Dimensions



## Frequency coefficient for ripple current

Frequency	120Hz	1kHz	10kHz	100kHz
Coefficient	0.15	0.40	0.75	1.00

[Standard]

Size	⊘D±0.5	L	W±0.2	H±0.2	C±0.2	R	P±0.2
8.0×9.7	8.0	9.7±0.5	8.3	8.3	9.0	0.8 to 1.1	3.2
10.0×10.5	10.0	10.5±0.5	10.3	10.3	11.0	0.8 to 1.1	4.6
10.0×12.5	10.0	12.5±0.5	10.3	10.3	11.0	0.8 to 1.1	4.6
10.0×16.5	10.0	16.5±0.5	10.3	10.3	11.0	0.8 to 1.1	4.6

(unit: mm)

## Marking and Dimensions



[Vibration Resistance]

Size	⊘D±0.5	L	W±0.2	H±0.2	C±0.2	R	P±0.2
8.0×9.9	8.0	9.9±0.5	8.3	8.3	9.0	0.8 to 1.1	3.2
10.0×10.7	10.0	10.7±0.5	10.3	10.3	11.0	0.8 to 1.1	4.6
10.0×12.7	10.0	12.7±0.5	10.3	10.3	11.0	0.8 to 1.1	4.6
10.0×16.7	10.0	16.7±0.5	10.3	10.3	11.0	0.8 to 1.1	4.6

(unit: mm)

### • Standard Ratings

Rated Voltage [Vdc]	Rated Capacitance [μF]	Size ØD x L [mm]	ESR (20°C, 100kHz) [mΩ] [max.]	Rated Ripple Current (150°C, 100kHz) [mA rms]	Part Number
25	150	8.0 x 9.7	27	800	25HVJ150MD10□
	270	10.0 x 10.5	20	1000	25HVJ270ME10□
	470	10.0 x 12.5	14	1800	25HVJ470ME12□
	680	10.0 x 16.5	11	2200	25HVJ680ME16□
35	100	8.0 x 9.7	30	770	35HVJ100MD10□
	150	10.0 x 10.5	23	950	35HVJ150ME10□
	470	10.0 x 16.5	11	2200	35HVJ470ME16□
50	56	8.0 x 9.7	35	700	50HVJ56MD10□
	100	10.0 x 10.5	28	900	50HVJ100ME10□
	220	10.0 x 16.5	13	2100	50HVJ220ME16□
63	33	8.0 x 9.7	40	650	63HVJ33MD10□
	56	10.0 x 10.5	30	840	63HVJ56ME10□
	150	10.0 x 16.5	15	1500	63HVJ150ME16□
	180	10.0 x 16.5	15	1800	63HVJ180ME16□
80	68	10.0 x 12.5	32	1300	80HVJ68ME12□
	100	10.0 x 16.5	16	1800	80HVJ100ME16□

\*Terminal Code : V(Vibration-proof products)