HRJ

Radial Lead 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 63Vdc	
Capacitance range	33 to 270μF	
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)	Rated voltage(V) / 25 / 35 / 50 / 63 Tanδ / 0.14 / 0.12 / 0.10 / 0.08 (at 20°C, 120Hz)	
ESR	Less than or equal to the value of Standard Ratings (at 20°C, 100kHz)	
Low temperature characteristics (Impedance ratio at 100kHz)	Z (-25 ℃) / Z (+20 ℃) ≤ 1.5 Z (-55 ℃) / Z (+20 ℃) ≤ 2.0	
Endurance	150°C, 1,000 hrs(6.3Ø : 2,000 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)	
Damp Heat (Steady State)	85°C, 85% RH, 2,000 hrs, rated voltage applied	
	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

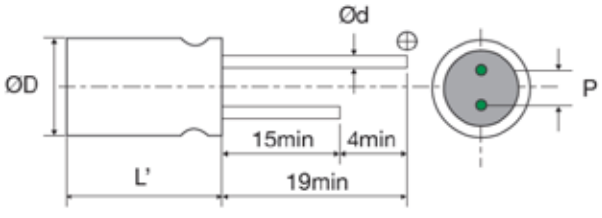
Example: HRJ series, 25V / 270μF

25	HRJ	270	M	E	11
Voltage	Series	Capacitance	Tolerance	Diameter	Length

Frequency coefficient for ripple current

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

Marking and Dimensions



(unit: mm)

Size	ØD±0.5	L	L'	P±0.5	Ød
8.0×9.5	8.0	9.5	L±1.0	3.5	0.60
10.0×10.5	10.0	10.5		5.0	0.60
10.0×11.5	10.0	11.5		5.0	0.60

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) [mArms]	Part Number
25	150	8.0 x 9.5	27	800	25HRJ150MD10
	270	10.0 x 10.5	20	1000	25HRJ270ME10
35	100	8.0 x 9.5	30	770	35HRJ100MD10
	150	10.0 x 10.5	23	950	35HRJ150ME10
50	56	8.0 x 9.5	35	700	50HRJ56MD10
	100	10.0 x 10.5	28	900	50HRJ100ME10
63	33	8.0 x 9.5	40	650	63HRJ33MD10
	56	10.0 x 10.5	30	840	63HRJ56ME10