

HRJ

Radial Lead Type
series

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



Specifications

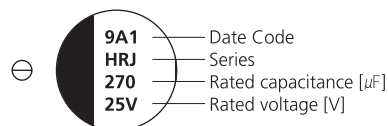
Items	Characteristics														
Category temperature range	-55 to +150℃														
Rated voltage range	25 to 63Vdc														
Capacitance range	33 to 270μF														
Capacitance tolerance	±20% [M] (at 20℃, 120Hz)														
Leakage current	I=0.01CV or 3μA whichever is greater (at 20℃, after 2 minutes)														
Tangent of loss angle(tanδ)	<table><tr><td>Rated voltage(V)</td><td>25</td><td>35</td><td>50</td><td>63</td></tr><tr><td>Tanδ</td><td>0.14</td><td>0.12</td><td>0.10</td><td>0.08</td></tr></table> (at 20℃, 120Hz)					Rated voltage(V)	25	35	50	63	Tanδ	0.14	0.12	0.10	0.08
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Tanδ	0.14	0.12	0.10	0.08											
ESR	Less than or equal to the value of Standard Ratings (at 20℃, 100kHz)														
Low temperature characteristics (Impedance ratio at 100kHz)	Z (-25 ℃) / Z (+20 ℃) ≤ 1.5 Z (-55 ℃) / Z (+20 ℃) ≤ 2.0														
Endurance	150℃, 1,000 hrs(6.3∅ : 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℃ with no voltage applied and then being stabilized at 20℃, capacitors shall meet the specified values for the endurance characteristics listed above.(with voltage treatment)														
Damp Heat (Steady State)	85℃, 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

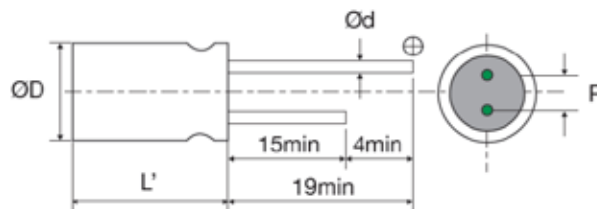
25	HRJ	270	M	E	11
Voltage	Series	Capacitance	Tolerance	Diameter	Length

Marking and Dimensions



Frequency coefficient for ripple current

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



(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) [mA rms]	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