

# RHR

Radial Lead Type  
series

High Reliability, High Voltage,  
High Temperature  
Low ESR, High ripple current  
Load life of 3,000h at 125°C



## ● Specifications

Items	Characteristics	
Temperature range	-55 to +105°C	
Rated voltage range	2.5 to 16Vdc	
Capacitance range	100 to 3,500μF	
Capacitance tolerance	±20% [M] (at 20°C, 120Hz)	
Tangent of loss angle	Less than or equal to the value of Standard Ratings (at 20°C, 120Hz)	
Leakage current	Less than or equal to the value of Standard Ratings (at 20°C, after 2 minutes)	
ESR	Less than or equal to the value of Standard Ratings	
Characteristics of impedance	$Z_{+105^\circ\text{C}}/Z_{+20^\circ\text{C}} \leq 1.25$ , $Z_{-55^\circ\text{C}}/Z_{+20^\circ\text{C}} \leq 1.25$ at 100kHz	
Endurance	105°C, 10,000 hrs at rated voltage	
	Appearance	No significant damage
	Capacitance change	Within±20% of the initial value
	Tangent of loss angle (tanδ)	≤150% of the initial specified value
	ESR(mΩ)	≤150% of the initial specified value
	Leakage current	≤The initial specified value
Damp Heat (Steady State)	60°C , 90 to 95% RH , 1,000 hrs , No-applied Voltage	
	Appearance	No significant damage
	Capacitance change	Within±20% of the initial value
	Tangent of loss angle (tanδ)	≤150% of the initial specified value
	ESR(mΩ)	≤150% of the initial specified value
	Leakage current	≤The initial specified value
Resistance to soldering heat	Flow method (260±5°C , 10s)	
	Appearance	No significant damage
	Capacitance change	Within±10% of the initial value
	Tangent of loss angle (tanδ)	≤130% of the initial specified value
	ESR(mΩ)	≤130% of the initial specified value
	Leakage current	≤The initial specified value

\* In case of some problems for measured values, measure after applying rated voltage for 120 minutes at 105°C

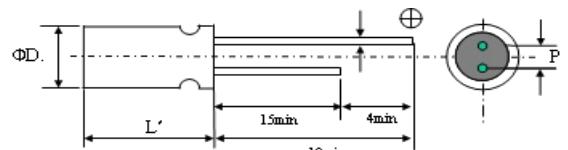
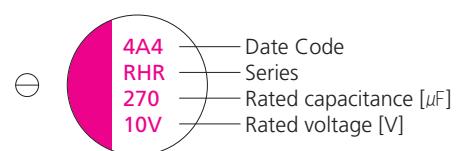
## ● Size List

(unit: mm)

<b>RV (SV)</b> <b>μF</b>	<b>2.5 (2.9)</b>	<b>4 (4.6)</b>	<b>6.3 (7.2)</b>	<b>10 (11.5)</b>	<b>16 (18.4)</b>
100					6.3×6 / 6.3×9
150				6.3×6	
180					8×9 / 8×11.5
220	5×9		6.3×6		8×9
270				8×7	8×9 / 8×11.5
330	5×9 / 6.3×6				8×9 / 8×11.5
470	5×9		6.3×9 / 8×9 8×11.5		10×11.5
560	5×9 / 6.3×9 8×9	6.3×9 / 8×9 8×11.5	6.3×9 8×9		
680		8×11.5	10×11.5		
820	6.3×9 / 8×7 8×9 / 8×11.5	10×11.5	8×9 8×11.5		
1000	8×9 10×11.5				
1200		8×9			
1500	8×9		10×11.5		
2700	10×11.5				
3500	10×11.5				

RV: Rated Voltage [V] SV: Surge Voltage [V] (at room temperature)

## ● Marking and Dimensions



Size	$\varnothing D \pm 0.5$	L	L'	$P \pm 0.5$	$\varnothing d$
5×9	5.0	9.0	L max.	2.0	0.6
6.3×6	6.3	6.0		2.5	0.45
8×7	8.0	7.0		3.5	0.45
6.3×9	6.3	9.0		2.5	0.6
8×9	8.0	9.0		3.5	0.6
8×11.5	8.0	11.5		3.5	0.6
10x11.5	10.0	11.5	L + 1.0 max.	5.0	0.6

## ● Standard Ratings

Rated Voltage [Vdc]	Rated Capacitance [ $\mu$ F]	Size ØD x L [mm]	ESR (20°C, 100kHz) [mΩ] [max.]	Rated Ripple Current (105°C, 100kHz) [mArms]	Tangent of Loss Angel [max.]	Leakage Current [ $\mu$ A, max.]	Part Number
2.5	220	5 x 9	7	4180	0.10	500	2RHR220MB9
	330	5 x 9	7	4180	0.10	500	2RHR330MB9
	330	6.3 x 9	7	5600	0.10	500	2RHR330MC9
	470	5 x 9	7	4180	0.10	500	2RHR470MB9
	560	5 x 9	7	4180	0.10	500	2RHR560MB9
	560	6.3 x 9	7	5600	0.10	500	2RHR560MC9
	560	8 x 9	7	6100	0.10	500	2RHR560MD9
	820	6.3 x 9	7	5600	0.10	500	2RHR820MC9
	820	8 x 7	8	5300	0.10	500	2RHR820MD7
	820	8 x 9	7	6100	0.10	500	2RHR820MD9
	820	8 x 11.5	7	6100	0.10	500	2RHR820MD11
	1000	8 x 9	7	6100	0.10	500	2RHR1000MD9
4	1500	8 x 9	7	6100	0.10	750	2RHR1500MD9
	2700	10 x 11.5	10	5560	0.10	1350	2RHR2700ME11
	3500	10 x 11.5	10	5560	0.10	1750	2RHR3500ME11
	560	6.3 x 9	7	5600	0.10	500	4RHR560MC9
	560	8 x 9	7	6100	0.10	500	4RHR560MD9
	560	8 x 11.5	7	6100	0.10	500	4RHR560MD11
	680	8 x 11.5	7	6100	0.10	544	4RHR680MD11
	820	10 x 11.5	7	6640	0.10	656	4RHR820ME11
	1000	8 x 9	7	6100	0.10	800	4RHR1000MD9
	1000	10 x 11.5	7	6640	0.10	800	4RHR1000ME11
	1200	8 x 9	7	6100	0.10	960	4RHR1200MD9
6.3	220	6.3 x 6	18	2980	0.10	277	6RHR220MC6
	470	6.3 x 9	7	5600	0.10	592	6RHR470MC9
	470	8 x 9	7	5700	0.10	592	6RHR470MD9
	470	8 x 11.5	7	5700	0.10	592	6RHR470MD11
	560	6.3 x 9	7	5600	0.10	705	6RHR560MC9
	560	8 x 9	7	5700	0.10	705	6RHR560MD9
	680	10 x 11.5	7	6640	0.10	857	6RHR680ME11
	820	8 x 9	7	5700	0.10	1033	6RHR820MD9
	820	8 x 11.5	7	5700	0.10	1033	6RHR820MD11
	1500	10 x 11.5	10	5560	0.10	1890	6RHR1500ME11
10	150	6.3 x 6	26	2400	0.10	300	10RHR150MC6
	270	8 x 7	22	3220	0.10	500	10RHR270MD7
16	100	6.3 x 6	24	2490	0.10	320	16RHR100MC6
	100	6.3 x 9	10	4680	0.10	500	16RHR100MC9
	150	8 x 7	22	3220	0.10	500	16RHR150MD7
	180	8 x 9	10	5000	0.10	576	16RHR180MD9
	180	8 x 11.5	16	4360	0.10	576	16RHR180MD11
	270	8 x 9	10	5000	0.10	864	16RHR270MD9
	270	8 x 11.5	11	5000	0.10	864	16RHR270MD11
	330	8 x 9	11	4520	0.10	1056	16RHR330MD9
	330	8 x 11.5	11	5000	0.10	1056	16RHR330MD11
	470	10 x 11.5	10	6100	0.10	1504	16RHR470ME11

Conductive Polymer Hybrid  
Aluminum Electrolytic Capacitors  
Radial Lead Type

Conductive Polymer Hybrid  
Aluminum Electrolytic Capacitors  
SMD Lead Type

Conductive Polymer Aluminum  
Electrolytic Capacitors\_Radial Lead Type

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Electrolytic Capacitors\_SMD Lead Type