

# RHHL

Radial Lead Type  
series

High Reliability, High Voltage, High Temperature  
Low ESR, High ripple current  
Load life of 4,000h at 125°C  
Compliance with AEC-Q200



## ● Specifications

Items	Characteristics	
Temperature range	-55 to +125°C	
Rated voltage range	16 to 80Vdc	
Capacitance range	22 to 1,000μF	
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	$Z_{+125^\circ\text{C}}/Z_{+20^\circ\text{C}} \leq 1.25$ , $Z_{-55^\circ\text{C}}/Z_{+20^\circ\text{C}} \leq 1.25$ at 100kHz	
Endurance	125°C, 4,000 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
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
Resistance to soldering heat	Leakage current	
	Flow method (260±5°C, 10s)	≤The initial specified value
	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 125°C

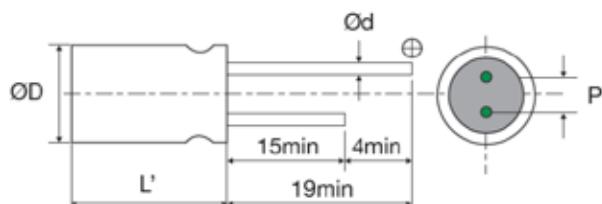
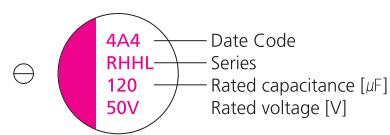
## ● Size List

(unit: mm)

$\mu\text{F}$	RV (SV) (20.0)	16 (31.3)	25 (43.8)	35 (62.5)	50 (78.8)	63 (100.0)
22					6.3×6	
39				6.3×6	8×7	
56				8×7		
68		6.3×6				
100					8×11.5	
120		6.3×6				
180			8×7			
220	6.3×6				10×11.5	
270		8×7		8×11.5		
330	8×7					
470				10×11.5		
560			8×11.5			
680		8×11.5				
1000			10×11.5			

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

## ● Marking and Dimensions



Size	$\text{ØD} \pm 0.5$	L	$L'$	$P \pm 0.5$	$\text{Ød}$
6.3×6	6.3	6.0	Lmax	2.5	0.45
8×7	8.0	7.0		3.5	0.45
8×11.5	8.0	11.5	L+1.0max	3.5	0.60
10.0×11.5	10.0	11.5		5.0	0.60

## ● Standard Ratings

Rated Voltage [Vdc]	Rated Capacitance [ $\mu$ F]	Size ØD x L [mm]	ESR (20°C, 100kHz) [mΩ] [max.]	Rated Ripple Current (125°C, 100kHz) [mAmps]	Tangent of Loss Angel [max]	Leakage Current [ $\mu$ A, max]	Part Number
	220	8 x 7.0	30	1500	0.1	105	16RHHL220MD7
16	560	8 x 11.5	16	3800	0.1	268	16RHHL560MD12
	1000	10 x 11.5	13	4300	0.1	480	16RHHL1000ME12
	100	8 x 7.0	41	1200	0.1	75	25RHHL100MD7
25	270	8 x 11.5	19	3300	0.1	202	25RHHL270MD12
	470	10 x 11.5	15	4100	0.1	352	25RHHL470ME12
	68	8 x 7.0	44	1200	0.1	71	35RHHL68MD7
35	220	8 x 11.5	21	3300	0.1	231	35RHHL220MD12
	330	10 x 11.5	16	3900	0.1	346	35RHHL330ME12
	39	8 x 7.0	45	1300	0.1	58	50RHHL39MD7
50	120	8 x 11.5	25	2900	0.1	180	50RHHL120MD12
	180	10 x 11.5	19	3500	0.1	270	50RHHL180ME12
	22	8 x 7.0	48	1100	0.1	42	63RHHL22MD7
63	56	8 x 11.5	27	2900	0.1	105	63RHHL56MD12
	100	10 x 11.5	24	3000	0.1	189	63RHHL100ME12
	39	8 x 11.5	35	1600	0.1	93	80RHHL39MD12
80	68	10 x 11.5	28	2100	0.1	163	80RHHL68ME12

 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

 Conductive Polymer Aluminum  
 Electrolytic Capacitors\_SMD Lead Type