

RLH series

- Higher temperature endurance guaranteed than RL series
- Super low ESR at a high frequency
- High ripple current



Specifications

Items	Characteristics	
Temperature range	-55°C ~ +125°C	
Rated voltage range	2.5Vdc ~ 16.0Vdc	
Capacitance range	100μF ~ 3,500μF	
Capacitance tolerance	±20% [M] (at 20°C, 120Hz)	
Tangent of loss angle	Less than or equal to the value of STANDARD RATING (at 20°C, 120Hz)	
Leakage current	Less than or equal to the value of STANDARD RATING (at 20°C, after 2 minutes)	
ESR	Less than or equal to the value of STANDARD RATING	
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	125°C, 1,000 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, 1000 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 125°C

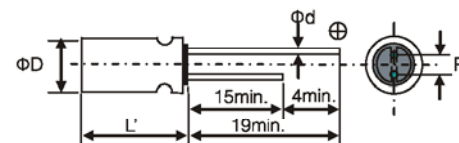
Dimensions

(unit : mm)

RV μF	2.5(3.3)	4(5.2)	6.3(8.2)	10(11.5)	16(18.4)
100					6.3x8.0, 6.3x11.5
150				6.3x8.0	
180					8.0x9.0, 8.0x11.5
270					8.0x9.0, 8.0x11.5
330					8.0x9.0, 8.0x11.5
470			8.0x9.0, 8.0x11.5		10x11.5
560	6.3x8.0 8.0x9.0	6.3x8.0, 8.0x9.0 8.0x11.5	6.3x8.0 8.0x9.0		
680		8.0x11.5	10x11.5	8.0x11.5	
820	6.3x8.0, 8.0x9.0 8.0x11.5	10x11.5	8.0x9.0 8.0x11.5		
1000	8.0x9.0	8.0x9.0, 10x11.5			
1200		8.0x9.0			
1500	8.0x9.0		10x11.5		
2700	10x11.5				
3500	10x11.5				

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

Marking and Size list



Size	ΦD±0.5	L	L'	P±0.5	Φd
6.3x8.0	6.3	8.0	L+1.0max	2.5	0.5
6.3x11.5	6.3	11.5		2.5	0.5
8.0x9.0	8.0	9.0	Lmax	3.5	0.6
8.0x11.5	8.0	11.5	L+1.0max	3.5	0.6
10.0x11.5	10.0	11.5		5.0	0.6

Standard ratings

Rated Voltage [Vdc]	Rated Capacitance [μ F]	Size Φ D x L [mm]	ESR (20°C, 100kHz) [m Ω][max.]	Rated Ripple Current (105°C, 100kHz) [mA rms, max.]	Tangent of Loss Angle [max.]	Leakage Current [μ A, max.]	Part Number
2.5	560	6.3x8.0	7	3500	0.10	500	2RLH560MC8
	560	8.0x9.0	7	6100	0.10	280	2RLH560MD9
	820	6.3x8.0	7	3500	0.10	500	2RLH820MC8
	820	8.0x9.0	7	6100	0.10	410	2RLH820MD9
	820	8.0x11.5	7	6100	0.10	410	2RLH820MD11
	1000	8.0x9.0	7	6100	0.10	500	2RLH1000MD9
	1500	8.0x9.0	7	6100	0.10	750	2RLH1500MD9
	2700	10x11.5	10	5560	0.10	1350	2RLH2700ME11
	3500	10x11.5	10	5560	0.10	1750	2RLH3500ME11
4	560	6.3x8.0	7	3500	0.10	500	4RLH560MC8
	560	8.0x9.0	7	6100	0.10	448	4RLH560MD9
	560	8.0x11.5	7	6100	0.10	448	4RLH560MD11
	680	8.0x11.5	7	6100	0.10	544	4RLH680MD11
	820	10x11.5	7	6640	0.10	656	4RLH820ME11
	1000	8.0x9.0	7	6100	0.10	800	4RLH1000MD9
	1000	10x11.5	7	6640	0.10	800	4RLH1000ME11
	1200	8.0x9.0	7	6100	0.10	960	4RLH1200MD9
6.3	470	8.0x9.0	7	5700	0.10	592	6RLH470MD9
	470	8.0x11.5	7	5700	0.10	592	6RLH470MD11
	560	6.3x8.0	7	3500	0.10	705	6RLH560MC8
	560	8.0x9.0	7	5700	0.10	705	6RLH560MD9
	680	10x11.5	7	6640	0.10	857	6RLH680ME11
	820	8.0x9.0	7	5700	0.10	1033	6RLH820MD9
	820	8.0x11.5	7	5700	0.10	1033	6RLH820MD11
	1500	10x11.5	10	5560	0.10	1890	6RLH1500ME11
10	150	6.3x8.0	27	3500	0.10	300	10RLH150MC8
	680	8.0x11.5	20	5700	0.10	1360	10RLH680MD11
16	100	6.3x8.0	25	2700	0.10	320	16RLH100MC8
	100	6.3x11.5	25	2820	0.10	320	16RLH100MC11
	180	8.0x9.0	13	5000	0.10	576	16RLH180MD9
	180	8.0x11.5	16	4360	0.10	576	16RLH180MD11
	270	8.0x9.0	11	4520	0.10	864	16RLH270MD9
	270	8.0x11.5	11	5000	0.10	864	16RLH270MD11
	330	8.0x9.0	11	4520	0.10	1056	16RLH330MD9
	330	8.0x11.5	11	5000	0.10	1056	16RLH330MD11
	470	10x11.5	10	6100	0.10	1504	16RLH470ME11