

RL series

- Larger capacitance or Lower ESR than RS series
- Super low ESR at a high frequency
- High ripple current



Specifications

Items	Characteristics	
Temperature range	-55°C ~ +105°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 impedence	$Z_{+105^{\circ}\text{C}/Z_{+20^{\circ}\text{C}}} \leq 1.25, Z_{-55^{\circ}\text{C}/Z_{+20^{\circ}\text{C}}} \leq 1.25$ at 100kHz	
Endurance	105°C, 3000 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 105°C

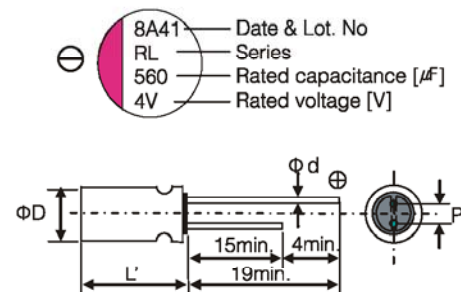
Dimensions

(unit : mm)

RV (SV) 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 [μF]	Size ΦD x L [mm]	ESR (20°C,100kHz) [mΩ][max.]	Rated Ripple Current (105°C, 100kHz) [mA rms, max.]	Tangent of Loss Angle [max.]	Leakage Current [μA, max.]	Part Number
2.5	560	6.3x8.0	7	3500	0.10	500	2RL560MC8
	560	8.0x9.0	7	6100	0.10	280	2RL560MD9
	820	6.3x8.0	7	3500	0.10	500	2RL820MC8
	820	8.0x9.0	7	6100	0.10	410	2RL820MD9
	820	8.0x11.5	7	6100	0.10	410	2RL820MD11
	1000	8.0x9.0	7	6100	0.10	500	2RL1000MD9
	1500	8.0x9.0	7	6100	0.10	750	2RL1500MD9
	2700	10x11.5	10	5560	0.10	1350	2RL2700ME11
	3500	10x11.5	10	5560	0.10	1750	2RL3500ME11
4	560	6.3x8.0	7	3500	0.10	500	4RL560MC8
	560	8.0x9.0	7	6100	0.10	448	4RL560MD9
	560	8.0x11.5	7	6100	0.10	448	4RL560MD11
	680	8.0x11.5	7	6100	0.10	544	4RL680MD11
	820	10x11.5	7	6640	0.10	656	4RL820ME11
	1000	8.0x9.0	7	6100	0.10	800	4RL1000MD9
	1000	10x11.5	7	6640	0.10	800	4RL1000ME11
	1200	8.0x9.0	7	6100	0.10	960	4RL1200MD9
6.3	470	8.0x9.0	7	5700	0.10	592	6RL470MD9
	470	8.0x11.5	7	5700	0.10	592	6RL470MD11
	560	6.3x8.0	7	3500	0.10	705	6RL560MC8
	560	8.0x9.0	7	5700	0.10	705	6RL560MD9
	680	10x11.5	7	6640	0.10	857	6RL680ME11
	820	8.0x9.0	7	5700	0.10	1033	6RL820MD9
	820	8.0x11.5	7	5700	0.10	1033	6RL820MD11
	1500	10x11.5	10	5560	0.10	1890	6RL1500ME11
10	150	6.3x8.0	27	3500	0.10	300	10RL150MC8
	680	8.0x11.5	20	5700	0.10	1360	10RL680MD11
16	100	6.3x8.0	25	2700	0.10	320	16RL100MC8
	100	6.3x11.5	25	2820	0.10	320	16RL100MC11
	180	8.0x9.0	13	5000	0.10	576	16RL180MD9
	180	8.0x11.5	16	4360	0.10	576	16RL180MD11
	270	8.0x9.0	11	4520	0.10	864	16RL270MD9
	270	8.0x11.5	11	5000	0.10	864	16RL270MD11
	330	8.0x9.0	11	4520	0.10	1056	16RL330MD9
	330	8.0x11.5	11	5000	0.10	1056	16RL330MD11
	470	10x11.5	10	6100	0.10	1504	16RL470ME11