

## RSL series

- Longer life cycle 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 ~ 25.0Vdc	
Capacitance range	33μF ~ 1,500μF	
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	$Z_{100°C} / Z_{20°C} \leq 1.25$ , $Z_{50°C} / Z_{20°C} \leq 1.25$ at 100kHz	
Endurance	105°C, 5,000 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 105°C

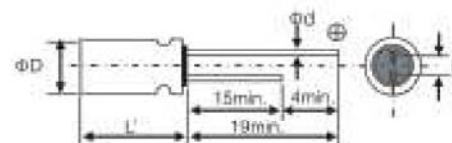
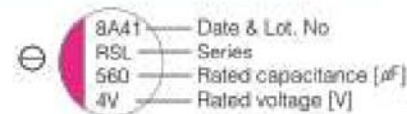
### Dimensions

(unit: mm)

RV μF	2.5Vdc	4Vdc	5.3Vdc	10Vdc	15Vdc	20Vdc	25Vdc
33							8.0x11.5
39					6.3x6.0		
47					6.3x6.0		
56				6.3x6.0			10x11.5
82			6.3x6.0		8.0x7.0		
100		6.3x6.0	6.3x6.0		6.3x11.5 8.0x7.0	8.0x11.5	10x11.5
120			6.3x6.0	8.0x7.0			
150		6.3x6.0	8.0x7.0	8.0x7.0			10x11.5
180					8.0x11.5	10x11.5	
220	6.3x6.0	8.0x7.0	8.0x7.0				
270					8.0x11.5		
330		8.0x7.0		8.0x11.5	10x11.5		
470	8.0x7.0		8.0x11.5		10x11.5		
560		8.0x11.5	8.0x11.5	10x11.5			
680	8.0x11.5						
820	8.0x11.5	10x11.5	10x11.5				
1000		10x11.5	10x11.5				
1200		10x11.5					
1500	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
6.3x6.0	6.3	6.0	L <sub>max</sub>	2.5	0.45
8.0x7.0	8.0	7.0		3.5	0.45
6.3x11.5	6.3	11.5	L+1.0max	2.5	0.50
8.0x11.5	8.0	11.5		3.5	0.60
10.0x11.5	10.0	11.5		5.0	0.60

## 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	220	6.3x6.0	23	2390	0.10	275	2RSL220MC6
	470	8.0x7.0	23	3300	0.10	588	2RSL470MD7
	680	8.0x11.5	13	4520	0.10	340	2RSL680MD11
	820	8.0x11.5	9	4520	0.10	410	2RSL820MD11
	1500	10x11.5	13	5440	0.10	750	2RSL1500ME11
4	100	6.3x6.0	45	1810	0.10	200	4RSL100MC6
	150	6.3x6.0	40	1810	0.10	300	4RSL150MC6
	220	8.0x7.0	35	2560	0.10	440	4RSL220MD7
	330	8.0x7.0	35	2560	0.10	660	4RSL330MD7
	560	8.0x11.5	13	4520	0.10	448	4RSL560MD11
	820	10x11.5	12	5230	0.10	656	4RSL820ME11
	1000	10x11.5	12	5440	0.10	800	4RSL1000ME11
	1200	10x11.5	13	5440	0.10	960	4RSL1200ME11
6.3	82	6.3x6.0	45	1700	0.10	258	6RSL82MC6
	100	6.3x6.0	40	1810	0.10	315	6RSL100MC6
	120	6.3x6.0	40	1810	0.10	378	6RSL120MC6
	150	8.0x7.0	40	2560	0.10	472	6RSL150MD7
	220	8.0x7.0	35	2560	0.10	693	6RSL220MD7
	470	8.0x11.5	15	4210	0.10	592	6RSL470MD11
	560	8.0x11.5	15	4210	0.10	706	6RSL560MD11
	820	10x11.5	12	5440	0.10	1033	6RSL820ME11
	1000	10x11.5	12	5440	0.10	1260	6RSL1000ME11
10	56	6.3x6.0	45	1700	0.10	280	10RSL56MC6
	120	8.0x7.0	35	2560	0.10	600	10RSL120MD7
	150	8.0x7.0	35	2560	0.10	750	10RSL150MD7
	330	8.0x11.5	17	3950	0.10	660	10RSL330MD11
	560	10x11.5	13	5230	0.10	1120	10RSL560ME11
16	39	6.3x6.0	50	1620	0.10	312	16RSL39MC6
	47	6.3x6.0	50	1620	0.10	376	16RSL47MC6
	82	8.0x7.0	40	2120	0.10	656	16RSL82MD7
	100	6.3x11.5	25	2820	0.10	320	16RSL100MC11
	100	8.0x7.0	40	2120	0.10	800	16RSL100MD7
	180	8.0x11.5	20	3640	0.10	576	16RSL180MD11
	270	8.0x11.5	13	3640	0.10	864	16RSL270MD11
	330	10x11.5	16	4720	0.10	1056	16RSL330ME11
	470	10x11.5	16	4720	0.10	1504	16RSL470ME11
20	100	8.0x11.5	24	3320	0.10	400	20RSL100MD11
	150	10x11.5	20	4320	0.10	600	20RSL150ME11
	180	10x11.5	20	4320	0.10	720	20RSL180ME11
25	33	8.0x11.5	30	3320	0.10	413	25RSL33MD11
	56	10x11.5	28	3800	0.10	700	25RSL56ME11
	100	10x11.5	20	4320	0.10	1250	25RSL100ME11