

RS series

- Standard radial lead type
- 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	$Z_{+105^{\circ}\text{C}/Z_{+20^{\circ}\text{C}}} \leq 1.25, Z_{-55^{\circ}\text{C}/Z_{+20^{\circ}\text{C}}} \leq 1.25$ 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

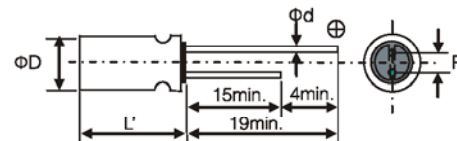
* In case of some problems for measured values, measure after applying rated voltage for 120 minutes at 105°C

Dimensions

RV μF	(unit: mm)						
	2.5(3.3)	4(5.2)	6.3(8.2)	10(11.5)	16(18.4)	20(23.0)	25(28.7)
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	Lmax	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 ØD 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	2RS220MC6
	470	8.0x7.0	23	3300	0.10	588	2RS470MD7
	680	8.0x11.5	13	4520	0.10	340	2RS680MD11
	820	8.0x11.5	9	4520	0.10	410	2RS820MD11
	1500	10x11.5	13	5440	0.10	750	2RS1500ME11
4	100	6.3x6.0	45	1810	0.10	200	4RS100MC6
	150	6.3x6.0	40	1810	0.10	300	4RS150MC6
	220	8.0x7.0	35	2560	0.10	440	4RS220MD7
	330	8.0x7.0	35	2560	0.10	660	4RS330MD7
	560	8.0x11.5	13	4520	0.10	448	4RS560MD11
	820	10x11.5	12	5230	0.10	656	4RS820ME11
	1000	10x11.5	12	5440	0.10	800	4RS1000ME11
	1200	10x11.5	13	5440	0.10	960	4RS1200ME11
6.3	82	6.3x6.0	45	1700	0.10	258	6RS82MC6
	100	6.3x6.0	40	1810	0.10	315	6RS100MC6
	120	6.3x6.0	40	1810	0.10	378	6RS120MC6
	150	8.0x7.0	40	2560	0.10	472	6RS150MD7
	220	8.0x7.0	35	2560	0.10	693	6RS220MD7
	470	8.0x11.5	15	4210	0.10	592	6RS470MD11
	560	8.0x11.5	15	4210	0.10	706	6RS560MD11
	820	10x11.5	12	5440	0.10	1033	6RS820ME11
	1000	10x11.5	12	5440	0.10	1260	6RS1000ME11
10	56	6.3x6.0	45	1700	0.10	280	10RS56MC6
	120	8.0x7.0	35	2560	0.10	600	10RS120MD7
	150	8.0x7.0	35	2560	0.10	750	10RS150MD7
	330	8.0x11.5	17	3950	0.10	660	10RS330MD11
	560	10x11.5	13	5230	0.10	1120	10RS560ME11
16	39	6.3x6.0	50	1620	0.10	312	16RS39MC6
	47	6.3x6.0	50	1620	0.10	376	16RS47MC6
	82	8.0x7.0	40	2120	0.10	656	16RS82MD7
	100	6.3x11.5	25	2820	0.10	320	16RS100MC11
	100	8.0x7.0	40	2120	0.10	800	16RS100MD7
	180	8.0x11.5	20	3640	0.10	576	16RS180MD11
	270	8.0x11.5	13	3640	0.10	864	16RS270MD11
	330	10x11.5	16	4720	0.10	1056	16RS330ME11
	470	10x11.5	16	4720	0.10	1504	16RS470ME11
20	100	8.0x11.5	24	3320	0.10	400	20RS100MD11
	150	10x11.5	20	4320	0.10	600	20RS150ME11
	180	10x11.5	20	4320	0.10	720	20RS180ME11
25	33	8.0x11.5	30	3320	0.10	413	25RS33MD11
	56	10x11.5	28	3800	0.10	700	25RS56ME11
	100	10x11.5	20	4320	0.10	1250	25RS100ME11