

RSH series

- Higher temperature endurance guaranteed than RS 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 ~ 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°C} / Z _{+20°C} ≤ 1.25, Z _{-55°C} / Z _{+20°C} ≤ 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

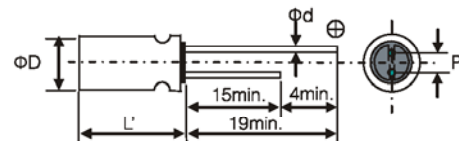
* In case of some problems for measured values, measure after applying rated voltage for 120 minutes at 125°C

Dimensions

RV [SV]	(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	L _{max}	2.5	0.45
8.0x7.0	8.0	7.0		3.5	0.45
6.3x11.5	6.3	11.5	L+1.0 _{max}	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	2RSH220MC6
	470	8.0x7.0	23	3300	0.10	588	2RSH470MD7
	680	8.0x11.5	13	4520	0.10	340	2RSH680MD11
	820	8.0x11.5	9	4520	0.10	410	2RSH820MD11
	1500	10x11.5	13	5440	0.10	750	2RSH1500ME11
4	100	6.3x6.0	45	1810	0.10	200	4RSH100MC6
	150	6.3x6.0	40	1810	0.10	300	4RSH150MC6
	220	8.0x7.0	35	2560	0.10	440	4RSH220MD7
	330	8.0x7.0	35	2560	0.10	660	4RSH330MD7
	560	8.0x11.5	13	4520	0.10	448	4RSH560MD11
	820	10x11.5	12	5230	0.10	656	4RSH820ME11
	1000	10x11.5	12	5440	0.10	800	4RSH1000ME11
	1200	10x11.5	13	5440	0.10	960	4RSH1200ME11
6.3	82	6.3x6.0	45	1700	0.10	258	6RSH82MC6
	100	6.3x6.0	40	1810	0.10	315	6RSH100MC6
	120	6.3x6.0	40	1810	0.10	378	6RSH120MC6
	150	8.0x7.0	40	2560	0.10	472	6RSH150MD7
	220	8.0x7.0	35	2560	0.10	693	6RSH220MD7
	470	8.0x11.5	15	4210	0.10	592	6RSH470MD11
	560	8.0x11.5	15	4210	0.10	706	6RSH560MD11
	820	10x11.5	12	5440	0.10	1033	6RSH820ME11
	1000	10x11.5	12	5440	0.10	1260	6RSH1000ME11
10	56	6.3x6.0	45	1700	0.10	280	10RSH56MC6
	120	8.0x7.0	35	2560	0.10	600	10RSH120MD7
	150	8.0x7.0	35	2560	0.10	750	10RSH150MD7
	330	8.0x11.5	17	3950	0.10	660	10RSH330MD11
	560	10x11.5	13	5230	0.10	1120	10RSH560ME11
16	39	6.3x6.0	50	1620	0.10	312	16RSH39MC6
	47	6.3x6.0	50	1620	0.10	376	16RSH47MC6
	82	8.0x7.0	40	2120	0.10	656	16RSH82MD7
	100	6.3x11.5	25	2820	0.10	320	16RSH100MC11
	100	8.0x7.0	40	2120	0.10	800	16RSH100MD7
	180	8.0x11.5	20	3640	0.10	576	16RSH180MD11
	270	8.0x11.5	13	3640	0.10	864	16RSH270MD11
	330	10x11.5	16	4720	0.10	1056	16RSH330ME11
	470	10x11.5	16	4720	0.10	1504	16RSH470ME11
20	100	8.0x11.5	24	3320	0.10	400	20RSH100MD11
	150	10x11.5	20	4320	0.10	600	20RSH150ME11
	180	10x11.5	20	4320	0.10	720	20RSH180ME11
25	33	8.0x11.5	30	3320	0.10	413	25RSH33MD11
	56	10x11.5	28	3800	0.10	700	25RSH56ME11
	100	10x11.5	20	4320	0.10	1250	25RSH100ME11