



• **Specifications**

Items	Characteristics	
Temperature range	-55 to +105°C	
Rated voltage range	2.5 to 25Vdc	
Capacitance range	6.8 to 1,500µF	
Capacitance tolerance	±20% [M] (at 20°C, 120Hz)	
Tangent of loss angle	Less than or equal to the value of Standard Ratings (at 20°C, 120Hz)	
Leakage current	Less than or equal to the value of Standard Ratings (at 20°C, after 2 minutes)	
ESR	Less than or equal to the value of Standard Ratings	
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, 3,000 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, 1,000 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

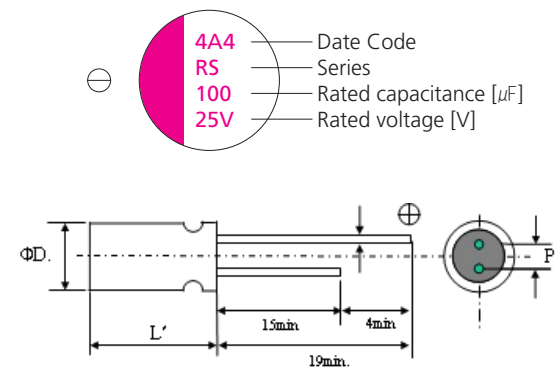
• **Size List**

(unit: mm)

µF \ R V (SV)	2.5 (2.9)	4 (4.6)	6.3 (7.2)	10 (11.5)	16 (18.4)	2.0 (23.0)	25 (28.7)
6.8							6.3×6
10							8×7
22						6.3×6	10×8
33						8×7	8×11.5
39					6.3×6		
47					6.3×6	8×7	
56				6.3×6		10×8	10×11.5
68						10×8	
82			6.3×6		8×7		
100	6.3×6	6.3×6			8×7	10×8	8×11.5
120				8×7		10×8	8×11.5
150	6.3×6	8×7	8×7	10×8	10×11.5	10×11.5	10×11.5
180					8×11.5		
220	8×7	8×7					
270				10×8			
330	8×7	10×8	8×11.5	10×11.5			
470	10×8	8×11.5		10×11.5			
560	8×11.5			10×11.5			
680	8×11.5	10×8					
820			10×11.5				
1000			10×11.5				
1200		10×11.5					
1500	10×11.5						

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

• **Marking and Dimensions**



(unit: mm)

Size	∅D±0.5	L	L'	P±0.5	∅d
6.3×6	6.3	6.0	L max.	2.5	0.45
8×7	8.0	7.0		3.5	0.45
10×8	10.0	8.0		5.0	0.60
6.3×11.5	6.3	11.5	L+1.0max.	2.5	0.50
8×11.5	8.0	11.5		3.5	0.60
10×11.5	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]	Tangent of Loss Angel [max.]	Leakage Current [μA, max.]	Part Number
2.5	680	8 x 11.5	13	4520	0.10	340	2RS680MD11
	1500	10 x 11.5	13	5440	0.10	750	2RS1500ME11
4	100	6.3 x 6	40	1810	0.10	200	4RS100MC6
	150	6.3 x 6	40	1810	0.10	300	4RS150MC6
	220	8 x 7	35	2560	0.10	440	4RS220MD7
	330	8 x 7	35	2560	0.10	660	4RS330MD7
	470	10 x 8	25	3700	0.10	376	4RS470ME8
	560	8 x 11.5	13	4520	0.10	448	4RS560MD11
	680	10 x 8	25	3700	0.10	544	4RS680ME8
	1200	10 x 11.5	13	5440	0.10	960	4RS1200ME11
6.3	82	6.3 x 6	45	1700	0.10	258	6RS82MC6
	100	6.3 x 6	40	1810	0.10	315	6RS100MC6
	150	8 x 7	35	2560	0.10	472	6RS150MD7
	220	8 x 7	35	2560	0.10	693	6RS220MD7
	330	10 x 8	25	3700	0.10	416	6RS330ME8
	470	8 x 11.5	15	4210	0.10	592	6RS470MD11
	820	10 x 11.5	12	5440	0.10	1033	6RS820ME11
	1000	10 x 11.5	12	5440	0.10	1260	6RS1000ME11
10	56	6.3 x 6	45	1700	0.10	280	10RS56MC6
	120	8 x 7	35	2560	0.10	600	10RS120MD7
	150	8 x 7	35	2560	0.10	750	10RS150MD7
	270	10 x 8	25	3700	0.10	540	10RS270ME8
	330	8 x 11.5	17	3950	0.10	660	10RS330MD11
	560	10 x 11.5	13	5230	0.10	1120	10RS560ME11
16	39	6.3 x 6	50	1620	0.10	312	16RS39MC6
	47	6.3 x 6	50	1620	0.10	376	16RS47MC6
	82	8 x 7	40	2120	0.10	656	16RS82MD7
	100	8 x 7	40	2120	0.10	800	16RS100MD7
	150	10 x 8	30	3020	0.10	480	16RS150ME8
	180	8 x 11.5	20	3640	0.10	576	16RS180MD11
	330	10 x 11.5	16	4720	0.10	1056	16RS330ME11
	470	10 x 11.5	16	4720	0.10	1504	16RS470ME11
20	22	6.3 x 6	60	1450	0.10	220	20RS22MC6
	33	8 x 7	45	1890	0.10	330	20RS33MD7
	47	8 x 7	45	1890	0.10	470	20RS47MD7
	56	10 x 8	40	2400	0.10	224	20RS56ME8
	68	10 x 8	40	2400	0.10	272	20RS68ME8
	100	10 x 8	35	2570	0.10	400	20RS100ME8
	100	8 x 11.5	24	3320	0.10	400	20RS100MD11
	150	10 x 11.5	20	4320	0.10	600	20RS150ME11
25	6.8	6.3 x 6	80	1200	0.10	170	25RS6R8MC6
	10	8 x 7	60	1500	0.10	250	25RS10MD7
	22	10 x 8	50	2000	0.10	275	25RS22ME8
	33	8 x 11.5	30	2980	0.10	413	25RS33MD11
	56	10 x 11.5	28	3800	0.10	700	25RS56ME11
	100	8 x 11.5	30	3320	0.10	500	25RS100MD11
150	10 x 11.5	25	4320	0.10	750	25RS150ME11	

Conductive Polymer Hybrid
Aluminum Electrolytic Capacitors
Radial Lead Type

Conductive Polymer Hybrid
Aluminum Electrolytic Capacitors
SMD Lead Type

Conductive Polymer Aluminum
Electrolytic Capacitors_Radial Lead Type

Conductive Polymer Aluminum
Electrolytic Capacitors_SMD Lead Type