Amber Electronic Limited

UL - 105°C SMD Aluminum Electrolytic Capacitor (Long life)

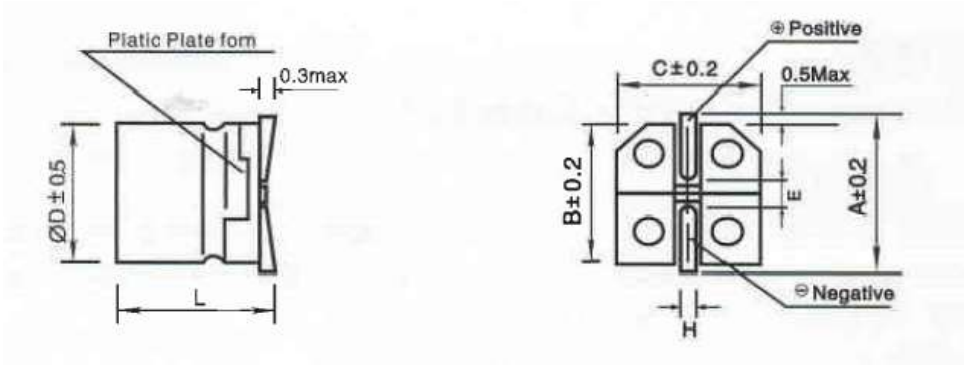
Features

- 3000~5000hrs at 105°C
- Case diameter 6mm ~ 10mm
- Reflow soldering is available
- Available for high densify surface mounting
- High stability and reliability
- RoHS Compliant

Specifications

Item	Performance Characteristics								
Operating Temperature Range	-55~+105℃								
Rated Voltage Range	6.3V ~ 100V								
Nominal Capacitance Range	4.7uF ~ 1500μF								
Norminal Capacitance Tolerance	±20%(+20℃ ,120Hz)								
Leakage Current (MAX)	I = 0.01CV(μA) or 3μA after2 minutes								
	I=Leakage Current (μA) C=Norminal Capacitance (μF) V=Rated Voltage (V)								
Dissipation Factor (MAX) (tgδ,+20℃ ,120Hz)	Rated Voltage (V)	6.3	10	16	25	35	50	63	100
	tgδ	0.3	0.24	0.2	0.18	0.16	0.14	0.14	0.14
Load Life	After applying rated voltage with max ripple current for 5000hrs(Φ6.3=3000H) at 105℃, and then resumed 16 hours, the capacitors shall meet the following requirements.								
	Capacitance change : within ±30% of the initial measured value								
	Leakage current : ≤ the initial specified value								
	Dissipation factor: ≤ 300% of the initial specified value								
Shelf Life	After storage for 1000hrs at 105℃, then resumed 16 hours, the capacitors shall meet the following requirements.								
	Capacitance change : within ±30% of the initial measured value								
	Leakage current : ≤ 200% of the initial specified value								
	Dissipation factor: ≤ 300% of the initial specified value								
Resistance to Soldering Heat	The capacitors shall be kept on the hot plate maintained at 250℃ for 30 seconds. After removing the hot plate and restored at room temperature, they meet the following requirements.								
	Capacitance change : within ±10% of the initial measured value								
	Leakage current : ≤ the initial specified value								
	Dissipation factor: ≤ the initial specified value								
Low Temperature Stability Impedance Ratio(MAX) 120Hz	Rated Voltage (V)	6.3	10	16	25	35	50	63	100
	Z-25℃/Z+20℃	4	3	2	2	2	2	2	2
	Z-55℃/Z+20℃	8	6	4	4	3	3	3	3

Diagram of Dimensions



Unit: mm

Φ D	L	A	B	C	E	H
6.3	7.7 ±0.3	7.2	6.6	6.6	2.1	0.5~0.9
8	10.2 ±0.5	9.1	8.3	8.3	3.1	0.8~1.1
10	10.2 ±0.5	11.1	10.3	10.3	4.5	0.8~1.1

Multiplier for Ripple Current

Frequency coefficient

Frequency(Hz)	50	120	300	1k	≥10k
Coefficient	0.70	1.00	1.17	1.36	1.5

Standard Size

Rated Voltage (Vdc)	6.3V		10V		16V		25V	
Capacitance (μF)	DxL (mm)	mA	DxL (mm)	mA	DxL (mm)	mA	DxL (mm)	mA
100							6.3 x 7.7	91
220	6.3 x 7.7	105	6.3 x 7.7	105	8 x 10.2 6.3 x 7.7	150 105	8 x 10.2	175
330	6.3 x 7.7	105	8 x 10.2	196	8 x 10.2	195	10 x 10.2 8 x 10.2	240 220
470	8 x 10.2	210	8 x 10.2	210	10 x 10.2 8 x 10.2	295 230	10 x 10.2	280
1000	10 x 10.2 8 x 10.2	300 230	10 x 10.2	315				
1500	10 x 10.2	315						
Rated Voltage (Vdc)	35V		50V		63V		100V	
Capacitance (μF)	DxL (mm)	mA	DxL (mm)	mA	DxL (mm)	mA	DxL (mm)	mA
4.7							6.3 x 7.7	35
10					6.3 x 7.7	39	8 x 10.2 6.3 x 7.7	77 35
22			6.3 x 7.7	51	8 x 10.2 6.3 x 7.7	98 49	10 x 10.2 8 x 10.2	126 84
33			6.3 x 7.7	60	8 x 10.2	112	8 x 10.2	133
47	6.3 x 7.7	70	8 x 10.2 6.3 x 7.7	120 63	10 x 10.2 8 x 10.2	160	10 x 10.2	140
100	8 x 10.2 10 x 10.2	120	10 x 10.2 8 x 10.2	170 63	10 x 10.2	196		
220	10 x 10.2 8 x 10.2	220	10 x 10.2	220				
330	10 x 10.2	245						

mA Rated ripple crrent (mA 105℃,120kHz)

Customer products are available on request.