Amber Electronic Limited

UE - 2000H at 105°C SMD Aluminum Electrolytic Capacitor (Low impedance)

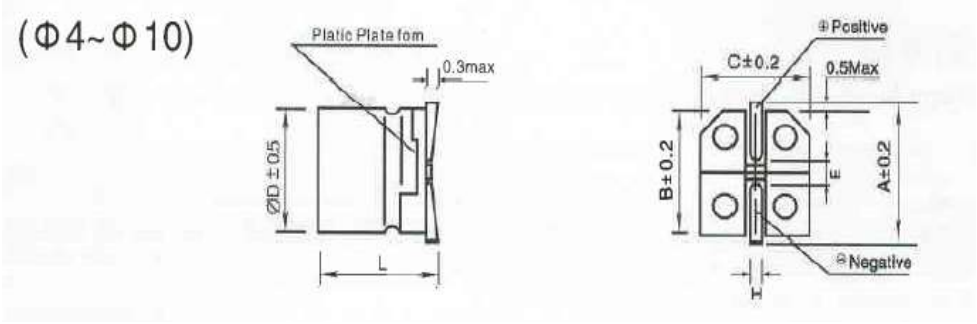
Features

- 2000 hrs at 105°C
- Case diameter 4mm~10mm
- Low impedance
- Reflow soldering is available
- High stability and reliability
- Available for high densify surface mounting
- RoHS Compliant

Specifications

Item	Performance Characteristics							
Operating Temperature Range	-55~+105℃							
Rated Voltage Range	6.3V ~ 50V							
Nominal Capacitance Range	0.1uF ~ 1500μF							
Norminal Capacitance Tolerance	±20%(120Hz, +20℃)							
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	50
	tgδ	0.26	0.2	0.16	0.14	0.12	0.12	0.12
Load Life	After applying rated voltage for with max ripple current for 2000hrs at 105°C and then resumed 16 hours, the capacitors shall meet the following requirements.							
	Capacitance change : within ±30% of the initial measured value							
	Leakage current : ≤ Not more than the specified value							
	Dissipation factor: ≤ 300% of the 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 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 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
	Z-25℃/Z+20℃	< Φ8	4	3	2	2	2	2
		≥ Φ8	5	4	3	2	2	2
	Z-55℃/Z+20℃	< Φ8	12	8	4	4	3	3
		≥ Φ8	10	8	6	4	3	3

Diagram of Dimensions



Unit: mm

ΦD	L	A	B	C	E	H
4	5.4 ±-0.3	5	4.3	4.3	1	0.5~0.9
5	5.4 ±-0.3	6	5.3	5.3	1.5	0.5~0.9
6.3	5.4 ±-0.3	7.2	6.6	6.6	2.1	0.5~0.9
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	0.64	0.5	0.64	0.83	1

Standard Size

Rated Voltage (Vdc)	6.3V			10V			16V		
Capacitance (μF)	DxL (mm)	Ω	mA	DxL (mm)	Ω	mA	DxL (mm)	Ω	mA
1									
2.2									
3.3									
4.7							4 x 5.4	4.5	38
10							4 x 5.4	4.5	50
22	4 x 5.4	4.5	50	4 x 5.4	4.5	50	5 x 5.4	1.9	80
33	4 x 5.4	4.5	50	5 x 5.4	1.9	80	6.3 x 5.4	1.1	115
47	5x 5.4	1.9	80	6.3 x 5.4	1.1	115	6.3 x 5.4	1.1	115
100	6.3x 5.4	1.1	115	6.3 x 5.4	1.1	115	6.3 x 5.4	1.1	115
150	6.3x 5.4	1.1	115	6.3 x 7.7	0.85	150	6.3 x 7.7	0.85	150
220	6.3x 7.7	0.85	150	6.3 x 5.4	1.1	115	6.3 x 7.7	0.85	150
				6.3 x 7.7	0.85	150			
330	6.3x 7.7	0.85	150	8 x 10.2	0.43	240	8 x 10.2	0.43	240
470	8x10.2	0.43	240	8 x 10.2	0.43	240	8 x 10.2	0.43	240
							10 x 10.2	0.23	360
1000	10x10.2	0.23	360	10 x 10.2	0.23	360			
1500	10x10.2	0.23	360						

Rated Voltage (Vdc)	25V			35V			50V		
Capacitance (μF)	DxL (mm)	Ω	mA	DxL (mm)	Ω	mA	DxL (mm)	Ω	mA
1									
2.2							4 x 5.4	7.3	38
3.3							4 x 5.4	7.3	38
4.7	4 x 5.4	4.5	50	4 x 5.4	4.5	50	4 x 5.4	7.3	38
10	4 x 5.4	4.5	50	5 x 5.4	1.9	80	5 x 5.4	3.8	53
22	5 x 5.4	1.9	80	6.3 x 5.4	1.1	115	6.3 x 5.4	2.2	103
33	6.3 x 5.4	1.1	115	6.3 x 5.4	1.1	115	6.3 x 7.7	1.7	116
47	6.3 x 5.4	1.1	115	6.3 x 5.4	1.1	115	6.3 x 7.7	1.7	116
100	6.3 x 7.7	0.85	150	8 x 10.2	0.43	240	8 x 10.2	0.85	185
150	8 x 10.2	0.43	240	10 x 10.2	0.23	360	10 x 10.2	0.45	418
220	8 x 10.2	0.43	240	10 x 10.2	0.23	360	10 x 10.2	0.45	418
330	8 x 10.2	0.43	240	10 x 10.2	0.23	360			
470	10 x 10.2	0.23	360	10 x 10.2	0.23	360			
1000									
1500									

mA Rated ripple crrent (mA 105℃,100kHz)

Ω Impedance: (Ω, 20℃,100kHz)

Customer products are available on request.