Chip Aluminum Electrolytic Capacitors

EAS9 - Mid to High Voltage SMD Aluminum Electrolytic Capacitors

Elecsound is a leading manufacturer of aluminum electrolytic capacitors. Mainly include radial type electrolytic capacitors and chip aluminum electrolytic capacitors.

Features:

Load life of 5000 hours with high temperature up to +105℃
Load life from 1000 hours to 5000 hours
Emboss carrier tape packing system is available for automatic insertion.
High stability and reliability
Available for reflow soldering
Available for high density surface mounting
Designed for surface mounting on density circuit board.
Rohs Compliant Load life from 1000 hours to 5000 hours

Specifictions:

Operating Temperature Range(℃): -40~+105
Rated Voltage Range(V): 160~450V
Nominal Capacitance Ranger(μF): 3.3~47
Capacitance Tolerance(20 ℃,120Hz) : 20%
Leakage current (μA): 10V～100V: <0.03CV or 4uA whichever is greater(at 25 ℃ ,after 2 minutes)
160V～450V: <0.04CV or 4uA whichever is greater(at 25 ℃ ,after 2 minutes)

Resistance to Soldering Heat

Capacitance Change	Within ±10% of the initial value
Tanδ	Initial specified value or less
Leakage Current	Initial specified value or less

Dissipation Factor(20 ℃,120Hz)

Rated Voltage (V)	160	200	250	400	450
tan δ	0.15	0.15	0.15	0.20	0.20

Stability at Low Temperature (Measurement frequency: 120Hz)

Rated voltage (V.DC)		160	200	250	400	450
Impedance ratio ZT/Z20 (max)	Z(-25℃)/Z (20℃)	3	3	3	6	6
	Z(-40℃)/Z(20℃)	6	6	6	10	10

Load Life(+125 ℃)

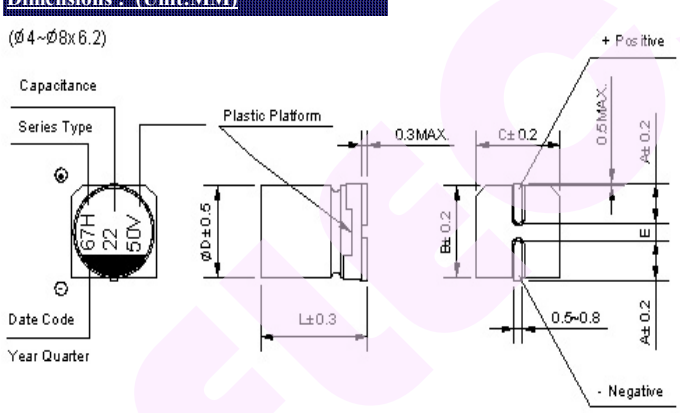
Time	5000 hours (1000 hours' for Φ6.3~Φ8×6.2)
Leakage Current	Not more than the specified value.
Capacitance Change	Within ±30% of the initial value
Dissipation Factor	Not more than 300% of the specified value.

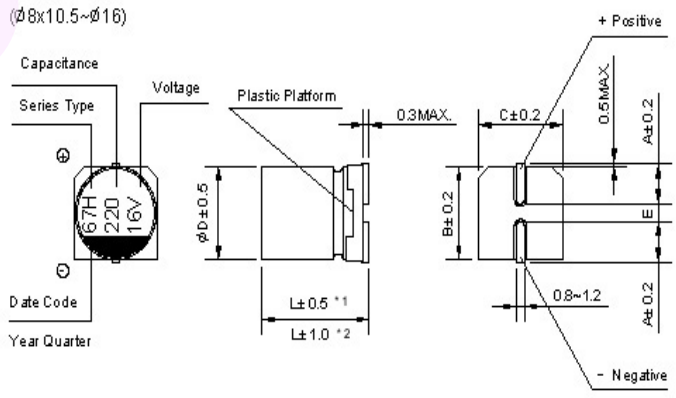
Shelf Life(+125 ℃)

Time	1000 hours
Leakage Current	Not more than the specified value.
Capacitance Change	Within ±15% of the initial value.
Dissipation Factor	Not more than 200% of the specified value.

After test:Rated Voltage to be applied for 30 minutes, 24 to 48 hours before measurement.

Dimensions : (Unit:MM)





D×L	4×5.4	5×5.4	6.3×5.4	6.3×7.7	8×6.2	8×10.5	10×10.5	10×13.5	12.5×13.5	12.5×16	16×16.5
A	1.8	2.1	2.4	2.4	3.3	2.9	3.2	3.2	4.7	4.7	5.5
B	4.3	5.3	6.6	6.6	8.3	8.3	10.3	10.3	12.8	12.8	16.3
C	4.3	5.3	6.6	6.6	8.3	8.3	10.3	10.3	12.8	12.8	16.3
E ± 0.2	1.0	1.3	2.2	2.2	2.2	3.1	4.4	4.4	4.4	4.4	6.7
L	5.4	5.4	5.4	7.7	6.2	10.5	10.5	13.5	13.5	16.0	16.5

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Frequency Correction Factor of Rated Ripple Current (10～100V)

Frequency / Capacitance (μF)	50Hz	120Hz	1kHz	10kHz	100kHz~
10～100	0.35	0.40	0.75	0.90	1.00
220～470	0.35	0.50	0.85	0.94	1.00
680～2200	0.40	0.60	0.85	0.95	1.00

Frequency Correction Factor of Rated Ripple Current (10～100V)

Frequency	50Hz	120Hz	300Hz	1kHz	10kH	100kHz~
Coefficient	1.00	1.25	1.50	1.75	1.80	1.80

Standard size & Maximum permissible ripple current

WV		10				16				25			
		1A				1C				1E			
Cap.(μF)		Case Size	ESR(Ω) 20℃	ESR(Ω) -40℃	Ripple Current	Case Size	ESR(Ω) 20℃	ESR(Ω) -40℃	Ripple Current	Case Size	ESR(Ω) 20℃	ESR(Ω) -40℃	Ripple Current
33	330	-	-	-	-	-	-	-	-	6.3×5.8	3.3	66	45
47	470	-	-	-	-	6.3×5.8	3.3	66	43	6.3×7.7	2.3	46	68
		-	-	-	-					(8×6.2)	(2.3)	(46)	(68)
100	101	6.3×7.7	2.3	46	72	8x10.5	1.0	20	115	8×10.5	1.0	20	126
		(8×6.2)	(2.3)	(46)	(72)								
220	221	8×10.5	1.0	20	136	10×10.5	0.7	13.4	175	10×10.5	0.7	13.4	211
330	331	10×10.5	0.7	13.4	188	10×13.5	0.5	9.5	280	12.5×13.5	0.14	2.1	750
										(10.5×13.5)	(0.5)	(9.5)	(270)
470	471	10×13.5	0.5	9.5	300	12.5×13.5	0.14	2.1	750	12.5×13.5	0.14	2.1	750
680	681	-	-	-	-	16×16.5	0.1	1.5	1000	16×16.5	0.1	1.5	1000
		-	-	-	-	(12.5×13.5)	(0.14)	(2.1)	(750)				
1000	102	12.5×16	0.11	1.5	900	-	-	-	-	-	-	-	-
		(12.5×13.5)	(0.14)	(2.1)	(750)	-	-	-	-	-	-	-	-
2200	222	16×16.5	0.1	1.5	1000	-	-	-	-	-	-	-	-

Ripple Current (mA rms) at 125℃ 100KHz

WV		35				50			
		1A				1C			
Cap.(μF)		Case Size	ESR(Ω) 20℃	ESR(Ω) -40℃	Ripple Current	Case Size	ESR(Ω) 20℃	ESR(Ω) -40℃	Ripple Current
10	100	6.3×5.8	3.3	66	38	6.3×7.7	2.3	46	50
						(6.3×5.8)	(3.3)	(66)	(38)
22	220	6.3×5.8	3.3	66	39	6.3×7.7	2.3	46	50
						(8×6.2)	(2.3)	(46)	(50)
33	330	6.3×7.7	2.3	46	62	8×10.5	1	20	83
		(8×6.2)	(2.3)	(46)	(62)				
47	470	8×10.5	1.0	20	92	10×10.5	0.7	13.4	111
100	101	10×10.5	0.7	13.4	151	12.5×13.5	0.23	3.5	550
220	221	12.5×13.5	0.14	2.1	750	16×16.5	0.15	2.3	850
		(10×13.5)	(0.5)	(9.5)	(260)	(12.5×13.5)	(0.23)	(3.5)	(550)
330	331	12.5×13.5	0.14	2.1	750	16×16.5	0.15	2.3	850
						(12.5×16)	(0.18)	(2.7)	(700)
470	471	16×16.5	0.1	1.5	1000	-	-	-	-
		(12.5×16)	(0.11)	(1.5)	(900)	-	-	-	-

Ripple Current (mA rms) at 125℃ 100KHz

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