

ARCOTRONICS

EAS Aluminium Electrolytic Capacitors

SINGLE-ENDED LEADS – High temperature 125°C / 3000- 5000 h

Description

Long life 3000-5000 hours and high reliability.

Marking

Arcotronics' logo series (EAS), operating temperature (125°C), capacitance (μF), rated voltage (Vdc), negative polarity (white line), date code.



Applications

Automotive and lighting application.

Features

Case with $\emptyset D \geq 6.0\text{mm}$ has the safety vent at the bottom.

Different case size available for capacitance value.

Diagram of dimensions (mm)

$\emptyset D$	5.0	6.0	8.0	10.0	13.0	16.0	18.0
p (pitch)	2.0	2.5	3.5	5.0		7.5	
$\emptyset d$ (leads)	0.5			0.6		0.8	

Electrical characteristics

Rated voltage	10 to 63Vdc
Operating temperature	-40 to +125°C
Capacitance range	0,47 μF to 1000 μF
Capacitance tolerance	$\pm 20\%$ at 120Hz / 20°C
Endurance test	3000 to 5000 h (see conditions in test method and performance)
Leakage current	$I = 0.01 \text{ CV} (\mu\text{A})$ or $3\mu\text{A}$ whichever is greater C = rated capacitance (μF); V = rated voltage (Vdc) (after than D.C. rated voltage at 20°C has been applied for 2 min)

Impedance Z characteristics at 120 Hz

Rated Voltage (Vdc)	10	16	25	35	50	63
Z (-25°C) / Z (20°C)	3	2	2	2	2	2
Z (-40°C) / Z (20°C)	6	4	4	4	4	4

Compensation factor of ripple current (R.C.) vs. frequency

Capacitance range	120 Hz	1 KHz	10 KHz	100 KHz
0.47~150	0.48	0.82	0.92	1
220~470	0.50	0.85	0.94	1
1000	0.60	0.87	0.95	1

Compensation factor of ripple current (R.C.) vs. temperature

Temperature	50°C	70°C	85°C	105°C	125°C
Multiplier factors	1.9	1.75	1.4	1	1

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Test method and performance

Conditions	Load life test	Shelf life test
Temperature:	125°C	125°C
Test duration:	10 to 63 Vdc ≤ Ø 8mm: 3000 h ≥ Ø 10.0mm: 5000 h	1000 hours
Ripple current:	max ripple current at 120Hz 125°C specified in table e.	no ripple current applied.
Voltage:	the sum of D.C. voltage and the peak A.C. voltage must not exceed the rated voltage of capacitor.	no voltage applied.
Performance	The following specifications will be satisfied when the capacitors will be restored at 25°C.	
Capacitance change:	within 20% of initial value.	within 20% of initial value.
Dissipation factor:	not exceed 200% of the initial requirement.	not exceed 200% of the initial requirement.
Leakage current:	not exceed initial requirement.	not exceed 500% of initial requirement.

10 Vdc Rated voltage – 13 Vdc Surge voltage					
Rated Cap. 120 Hz 20°C (µF)	Case Size DxL (mm)	D.F. max 120 Hz 25°C (tgδ %)	R.C. 120 Hz 125°C (mA rms)	L.C. 20°C 2 min. (uA)	Arcotronics P/N *
100	10x12	15	154	10	EAS107M010AH1AA
220	10x15	15	252	22	EAS227M010AH2AA
330	10x15	15	308	33	EAS337M010AH2AA
470	10x19	15	399	47	EAS477M010AH4AA
1 000	16x20	15	715	100	EAS108M010AM5AA

16 Vdc Rated voltage – 20 Vdc Surge voltage					
Rated Cap. 120 Hz 20°C (µF)	Case Size DxL (mm)	D.F. max 120 Hz 25°C (tgδ %)	R.C. 120 Hz 85°C (mA/rms)	L.C. 20°C 2 min. (uA)	Arcotronics P/N *
47	8x11	12	100	7	EAS476M016AG3AA
100	10x15	12	190	16	EAS107M016AH2AA
220	10x19	12	305	35	EAS227M016AH4AA
330	13x20	12	414	53	EAS337M016AL3AA
470	13x25	12	537	75	EAS477M016AL4AA

25 Vdc Rated voltage – 32 Vdc Surge voltage					
Rated Cap. 120 Hz 20°C (µF)	Case Size DxL (mm)	D.F. max 120 Hz 25°C (tgδ %)	R.C. 120 Hz 85°C (mA/rms)	L.C. 20°C 2 min. (uA)	Arcotronics P/N *
33	8x11	10	92	8	EAS336M025AG3AA
47	10x12	10	129	12	EAS476M025AH1AA
100	10x15	10	208	25	EAS107M025AH2AA
220	13x20	10	371	55	EAS227M025AH4AA
330	13x25	10	493	82	EAS337M025AL4AA
470	16x20	10	601	117	EAS477M025AM5AA

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35 Vdc Rated voltage – 44 Vdc Surge voltage					
Rated Cap. 120 Hz 20°C (μF)	Case Size DxL (mm)	D.F. max 120 Hz 25°C (tgδ %)	R.C. 120 Hz 85°C (mA/rms)	L.C. 20°C 2 min. (uA)	Arcotronics P/N *
22	8x11	10	75	8	EAS226M035AG3AA
33	10x12	10	108	11	EAS336M035AH1AA
47	10x15	10	142	16	EAS476M035AH2AA
100	10x19	10	225	35	EAS107M035AH4AA
220	13x25	10	403	77	EAS227M035AL4AA
330	16x20	10	503	115	EAS337M035AM5AA

50 Vdc Rated voltage – 63 Vdc Surge voltage					
Rated Cap. 120 Hz 20°C (μF)	Case Size DxL (mm)	D.F. max 120 Hz 25°C (tgδ %)	R.C. 120 Hz 85°C (mA/rms)	L.C. 20°C 2 min. (uA)	Arcotronics P/N *
0,47	8x11	8	12	3	EAS474M050AG3AA
1	8x11	8	17	3	EAS105M050AG3AA
2,2	8x11	8	26	3	EAS225M050AG3AA
3,3	8x11	8	32	3	EAS335M050AG3AA
4,7	8x11	8	38	3	EAS475M050AG3AA
10	8x11	8	56	5	EAS106M050AG3AA
22	10x12	8	99	11	EAS226M050AH1AA
33	10x15	8	133	16	EAS336M050AH2AA
47	10x15	8	159	23	EAS476M050AH2AA
100	13x20	8	279	50	EAS107M050AL3AA
220	13x25	8	459	110	EAS227M050AL4AA

63 Vdc Rated voltage – 79 Vdc Surge voltage					
Rated Cap. 120 Hz 20°C (μF)	Case Size DxL (mm)	D.F. max 120 Hz 25°C (tgδ %)	R.C. 120 Hz 85°C (mA/rms)	L.C. 20°C 2 min. (uA)	Arcotronics P/N *
0,47	8x11	8	12	3	EAS474M063AG3AA
1	8x11	8	17	3	EAS105M063AG3AA
2,2	8x11	8	26	3	EAS225M063AG3AA
3,3	8x11	8	32	3	EAS335M063AG3AA
4,7	8x11	8	38	3	EAS475M063AG3AA
10	8x11	8	56	6	EAS106M063AG3AA
22	10x12	8	99	14	EAS226M063AH1AA
33	10x15	8	133	21	EAS336M063AH2AA
47	10x15	8	159	30	EAS476M063AH2AA
100	13x20	8	279	63	EAS107M063AL3AA
220	13x25	8	459	139	EAS227M063AL4AA