



ALUMINUM CAPACITORS

ECL



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SMD Aluminum Capacitor

KEY BENEFITS

- Temperature up to 105 °C
- Low impedance
- High ripple current
- Miniaturized
- SMD technology for high mounting density

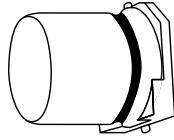
APPLICATIONS

- Industrial and professional
- Consumer
- Smoothing
- Filtering
- Buffering

Aluminum Capacitors

FEATURES

- Polarized aluminum electrolytic capacitors, non solid electrolyte
- Extra low impedance, high ripple current
- Temperature up to 105 °C
- RoHS compliant



APPLICATIONS

- SMD technology, for high mounting density
- Industrial and professional applications
- General industrial, consumer
- Smoothing, filtering, buffering

PACKAGING

- Supplied in blister-tape

DESCRIPTION	UNIT	VALUE
Nominal case size (Ø D x L)	mm	6 x 5.8 to 12.5 x 13.5
Rated capacitance range C _R	µF	10 to 1500
Capacitance tolerance	%	± 20
Rated voltage range	V	6.3 to 100
Category temperature range	°C	-40 to 105
Load life	h	2000
Based on sectional specification		IEC 60384-4/ EN 1303000
Climatic category		40/105/56

SELECTION CHART FOR C_R, U_R AND RELEVANT NOMINAL CASE SIZES (Ø D x L in mm)

C _R (µF)	RATED VOLTAGE (V)			
	6.3	10	16	25
10	→	→	→	→
22	→	→	→	→
33	→	→	→	→
47	→	→	→	→
68	→	→	→	→
100	→	→	→	→
220	6.3 x 5.8	6.3 x 7.7	8 x 6.2	8 x 10
330	8 x 6.2	→	8 x 10	→
470	→	8 x 10	10 x 10	→
680	→	→	→	→
1000	10 x 10	→	→	→
1500	10 x 10	→	→	→

ELECTRICAL DATA	
SYMBOL	DESCRIPTION
U _R	rated voltage
C _R	rated capacitance at 120 Hz
tan δ	max. dissipation factor at 120 Hz
R _{ESR}	max. equivalent series resistance at 120 Hz
I _R	rated alternating current at 120 Hz and upper category temperature
Z	max. impedance at 100 kHz

Note
Unless otherwise specified, all electrical values apply at T_{amb} = 20 °C, P = 86 to 100 kPa, RH = 45 to 75 %.

ORDERING EXAMPLE

ECL 22 µF/50 V, ± 20 %, size 6.3 x 5.8 mm
Ordering code: MALSECL00AD22HARK
For Standard Packaging Quantity (SPQ) and Minimum Order Quantity (MOQ) please refer to our price list or contact customer service.

ELECTRICAL DATA AND ORDERING INFORMATION									
U _R (V)	C _R 120 Hz (µF)	DIMENSIONS D x L (mm)	tan δ 120 Hz	Z 100 kHz/ 20 °C (Ω)	I _R 105 °C (mA)	WEIGHT (g)	CATALOG NUMBER		
6.3	220	6.3 x 5.8	0.24	0.44	230	0.30	MALSECL00AD322BARK		
	330	8 x 6.2	0.24	0.26	300	0.55	MALSECL00AE333BARK		
	1000	10 x 10	0.24	0.09	670	1.21	MALSECL00AG410BARK		
10	1500	10 x 10	0.24	0.09	670	1.21	MALSECL00AG415BARK		
	220	6.3 x 7.7	0.19	0.34	280	0.40	MALSECL00BM322CARK		
	470	8 x 10	0.19	0.17	450	1.00	MALSECL00AF947CARK		
16	680	10 x 10	0.19	0.09	670	1.21	MALSECL00AG368CARK		
	100	6.3 x 5.8	0.16	0.44	230	0.30	MALSECL00AD310DARK		
	220	8 x 6.2	0.16	0.26	300	0.55	MALSECL00AE322DARK		
25	330	8 x 10	0.16	0.17	450	1.00	MALSECL00AF333DARK		
	470	10 x 10	0.16	0.09	670	1.21	MALSECL00AG347DARK		
	68	6.3 x 5.8	0.14	0.44	230	0.30	MALSECL00AD268EARK		
35	100	8 x 6.2	0.14	0.26	300	0.55	MALSECL00AE310EARK		
	220	8 x 10	0.14	0.17	450	1.00	MALSECL00AF322EARK		
	33	6.3 x 5.8	0.12	0.44	230	0.30	MALSECL00AD233FARK		
50	47	6.3 x 5.8	0.12	0.44	230	0.30	MALSECL00AD247FARK		
	68	8 x 6.2	0.12	0.26	300	0.55	MALSECL00AE268FARK		
	100	8 x 10	0.12	0.17	450	1.00	MALSECL00AF310FARK		
100	220	10 x 10	0.12	0.09	670	1.21	MALSECL00AG322FARK		
	10	6.3 x 5.8	0.12	0.88	165	0.30	MALSECL00AD210HARK		
	22	6.3 x 5.8	0.12	0.88	165	0.30	MALSECL00AD222HARK		
1500	33	8 x 6.2	0.12	0.63	300	0.55	MALSECL00AE233HARK		
	47	8 x 6.2	0.12	0.63	300	0.55	MALSECL00AE247HARK		
	68	8 x 10	0.12	0.34	450	1.00	MALSECL00AF268HARK		
1500	10 x 10	10 x 10	0.12	0.18	670	1.21	MALSECL00AG310HARK		

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