



# ALUMINUM CAPACITORS

EKX



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Polarized Aluminum Electrolytic Capacitors

### KEY BENEFITS

- Temperature up to 105 °C
- Extra low impedance
- High ripple current
- High reliability
- Long life
- RoHS-compliant

### APPLICATIONS

- Industrial and professional
- Telecommunications
- Data processing
- Consumer

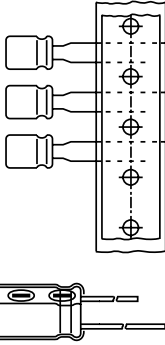
# Aluminum Capacitors Radial Style

## FEATURES

- Polarized aluminum electrolytic capacitor
- Small dimensions
- Ultra low impedance
- High ripple current
- Long lifetime

## APPLICATIONS

- Industrial electronics, telecommunication systems, data processing
- Professional switching power supply units
- DC/DC converters
- Smoothing, filtering



Component outlines

## QUICK REFERENCE DATA

DESCRIPTION	UNIT	VALUE
Nominal case size (Ø D x L)	mm	5 x 11 to 18 x 40
Rated capacitance range C <sub>R</sub>	µF	0.47 to 15 000
Capacitance tolerance	%	± 20
Rated voltage range	V	6.3 to 100
Category temperature range	°C	-40 to +105
Lead life	h	up to 5000
Based on sectional specification		IEC 60384-4/EN 130300
Climatic category IEC 68		40/105/56

## SELECTION CHART FOR C<sub>R</sub>, U<sub>R</sub> AND RELEVANT NOMINAL CASE SIZES (Ø D x L in mm)

C <sub>R</sub> (µF)	RATED VOLTAGE (V)							
	6.3	10	16	25	35	50	63	100
0.47	→	→	→	→	→	5 x 11	-	-
1.0	→	→	→	→	→	5 x 11	-	-
2.2	→	→	→	→	→	5 x 11	→	5 x 11
3.3	→	→	→	→	→	5 x 11	5 x 11	5 x 11
4.7	→	→	→	→	→	5 x 11	5 x 11	5 x 11
10	→	→	→	→	→	5 x 11	5 x 11	6.3 x 11
22	→	→	→	→	→	5 x 11	5 x 11	6.3 x 11
33	→	→	→	→	→	5 x 11	6.3 x 11	6.3 x 11
47	→	→	→	→	→	5 x 11	6.3 x 11	6.3 x 11
100	→	→	→	→	→	6.3 x 11	6.3 x 11	6.3 x 11
150	→	→	→	→	→	6.3 x 11	6.3 x 11	6.3 x 11
220	→	→	→	→	→	6.3 x 11	6.3 x 11	6.3 x 11
330	→	→	→	→	→	6.3 x 11	6.3 x 11	6.3 x 11
470	→	→	→	→	→	6.3 x 11	6.3 x 11	6.3 x 11
1000	→	→	→	→	→	6.3 x 11	6.3 x 11	6.3 x 11
1500	→	→	→	→	→	6.3 x 11	6.3 x 11	6.3 x 11
2200	→	→	→	→	→	6.3 x 11	6.3 x 11	6.3 x 11
3300	→	→	→	→	→	6.3 x 11	6.3 x 11	6.3 x 11
10 000	→	→	→	→	→	6.3 x 11	6.3 x 11	6.3 x 11
15 000	→	→	→	→	→	6.3 x 11	6.3 x 11	6.3 x 11

Note  
10 % capacitance tolerance on request

ELECTRICAL DATA	
SYMBOL	DESCRIPTION
U <sub>R</sub>	rated voltage
C <sub>R</sub>	rated capacitance at 120 Hz
tan δ	max. dissipation factor at 120 Hz
Z	max. impedance at 100 kHz
I <sub>R</sub>	rated alternating current (rms) at 100 kHz and upper category temperature

## Note

Unless otherwise specified, all electrical values at T<sub>a</sub> = 20 °C, P = 80 to 120 kPa, RH = 45 to 75 %

## ORDERING EXAMPLE

EKX 3300 µF/25 V, ± 20 %, size: 16 x 31.5 mm  
Leads: Long  
Ordering code: MALREKX00JSA43E00K

Leads: Short  
Ordering code: MALREKX05...

For 5 ≤ Ø D ≤ 8 mm  
Leads: Bent open, shortened and formed  
Ordering code: MALREKX09...

For 10 ≤ Ø D ≤ 18 mm  
Leads: Shortened and formed  
Ordering code: MALREKX06...

## ELECTRICAL DATA AND ORDERING INFORMATION

U <sub>R</sub> (V)	C <sub>R</sub> 120 Hz (µF)	tan δ 120 Hz	Z 100 kHz/20 °C (Ω)	I <sub>R</sub> 100 kHz/105 °C (mA)	WEIGHT (g)	CATALOG NUMBER (Long Leads)
6.3	330	0.22	0.15	1030	0.67	MALREKX00BA33B00K
	1000	0.22	0.053	4050	1.90	MALREKX00DC41B00K
	3300	0.28	0.025	2360	4.00	MALREKX00FE43B00K
	10 000	0.40	0.015	3680	9.00	MALREKX00IS10B00K
	15 000	0.50	0.014	3800	11.5	MALREKX00KL51B00K
10	100	0.19	0.30	250	0.42	MALREKX00AA310C00K
	220	0.19	0.15	405	0.67	MALREKX00BA32C00K
	470	0.19	0.072	760	1.10	MALREKX00PB347C00K
	1000	0.19	0.038	1430	2.50	MALREKX00DD410C00K
	1500	0.21	0.027	1820	3.10	MALREKX00DE4150C0K
16	2200	0.23	0.025	2360	4.00	MALREKX00FE42C00K
	3300	0.25	0.018	2770	5.20	MALREKX00FG43C00K
	4700	0.27	0.015	3460	7.70	MALREKX00GG447C00K
	10 000	0.39	0.014	3800	11.5	MALREKX00KL510C00K
	150	0.16	0.15	405	0.67	MALREKX00BA315D00K
330	330	0.16	0.072	760	1.10	MALREKX00PB333D00K
	470	0.16	0.053	1030	1.90	MALREKX00DC347D00K
	1000	0.18	0.027	1820	3.10	MALREKX00DE410D00K
	1500	0.18	0.025	2360	4.00	MALREKX00FE415D00K
	2200	0.20	0.018	2770	5.20	MALREKX00FG427D00K
4700	3300	0.22	0.015	3460	7.70	MALREKX00GG43D00K
	4700	0.24	0.015	3680	9.00	MALREKX00IS47D00K
	10 000	0.30	0.014	3800	11.5	MALREKX00AA247E00K
	150	0.14	0.15	405	0.67	MALREKX00BA310E00K
	220	0.14	0.072	760	1.10	MALREKX00PB322E00K
25	330	0.14	0.053	1030	1.90	MALREKX00DC333E00K
	470	0.14	0.038	1430	2.50	MALREKX00DE410E00K
	1000	0.14	0.025	2360	4.00	MALREKX00FE415E00K
	1500	0.16	0.015	3460	6.10	MALREKX00GG415E00K
	2200	0.18	0.015	3680	7.70	MALREKX00IS422E00K
4700	3300	0.20	0.015	3680	9.00	MALREKX00IS433E00K
	4700	0.22	0.014	3800	11.5	MALREKX00KL47E00K

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