



METALLIZED POLYESTER MKT C4AE Series

BOX CAPACITORS DC LINK APPLICATIONS

CAPACITORS FOR PCB APPLICATIONS

GENERAL TECHNICAL DATA

All dimensions are in mm

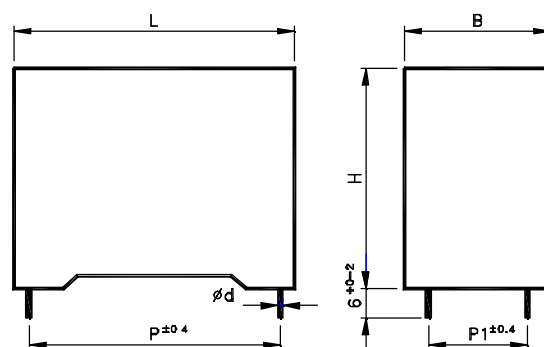
Reference Standards : IEC 1071 – EN 61071 - VDE 0560
Dielectric : Metallized Polyester Film
Winding : Non-inductive type

Case components: Solvent resistant plastic case with epoxy
and polyurethane resin sealing.
Flame retardant execution UL94 V0.

Terminals: Tinned copper 2 + 2 wires (See figure).
 $\varnothing d = 1.2 \text{ mm}$ (16 AWG)

IEC climatic category : -40/105/56 according to IEC 68-1
Temperature range (Case): -40 to + 105 °C

Installation: Whatever position



TEST METHODS AND PERFORMANCES

Test voltage terminal to terminal (Utt)	1.5 x Un for 2s at 25°C
Test voltage terminal to case (Utc)	3 KV 50Hz for 10 sec.
Permissible relative humidity	Annual average ≤ 95% on 30 days/year continuously 100% on other days occasionally 90%. Dewing not admissible.
Life expectancy	≥ 100.000 hours at Un
Failure quota	300/10 ⁹ components hours
Failure criteria	Short or open circuit Capacitance change: > 10 % DF change: > 2 x initial limit
Capacitance deviation in temperature range (-40..+105°C)	± 2% max on capacitance value at 20°C
Changes of capacitance versus operating time	-3% after 100000 hours at Un

ELECTRICAL CHARACTERISTICS

Capacitance	10 to 140 µF
Tolerance	± 5 % or ± 10 %
Rated Voltage	450 – 700 – 900 Vdc
Insulation Resistance	≥ 10000 MΩ x µF
Dv/Dt	≥ 10 V/µs
Repetitive Peak Current	See relative table
Rated Current (2 +2 wires)	See relative table
ESR	See relative table
ESL	See relative table

PACKAGING

NUMBER OF PIECES FOR PACKING UNIT

Box dimensions	N° of pieces	Weight kgr	Box dimensions	N° of pieces	Weight kgr
20x40x41.5	54	3.3	30x45x42	36	3.8
28x37x42.5	36	2.9	30x45x57.5	27	3.7
24x44x41.5	42	3.5	35x50x57.5	23	4.0

SERIES C4AE 450V

Code	C	Un	DV/dt	Ipkr	ESL	ESR (mΩ)	Irms (A)	Irms (A)	DIMENSIONS (mm)				
	uF	Vcc	V/us	Ap	nH	100 KHz	10 KHz 70°C	100 KHz 70°C	B	H	L	P	P1
						d=1.2 4 wires	d=1.2 4 wires	d=1.2 4 wires					
C4AEGBW5400A3FJ	40	450	18	702	41	2.74	23	29	20	40	41.5	37.5	10.2
C4AEGBW5550A3JJ	55	450	18	966	39	2.07	29	29	28	37	42.5	37.5	10.2
C4AEGBW5600A3HJ	60	450	18	1054	43	1.98	30	29	24	44	41.5	37.5	10.2
C4AEGBW5750A3LJ	75	450	18	1318	43	1.67	36	29	30	45	42	37.5	20.3
C4AEGBW6100A3MJ	100	450	12	1184	45	2.08	42	29	30	45	57.5	52.5	10.2
C4AEGBW6140A3NJ	140	450	12	1658	48	1.64	50	29	35	50	57.5	52.5	20.3

SERIES C4AE 700V

Code	C	Un	DV/dt	Ipkr	ESL	ESR (mΩ)	Irms (A)	Irms (A)	DIMENSIONS (mm)				
	uF	Vcc	V/us	Ap	nH	100 KHz	10 KHz 70°C	100 KHz 70°C	B	H	L	P	P1
						d=1.2 4 wires	d=1.2 4 wires	d=1.2 4 wires					
C4AEJBW5150A3FJ	15	700	27	411	41	5.17	15	26	20	40	41.5	37.5	5.1
C4AEJBW5200A3JJ	20	700	27	549	39	3.95	18	29	28	37	42.5	37.5	10.2
C4AEJBW5220A3HJ	22	700	27	604	43	3.67	20	29	24	44	41.5	37.5	10.2
C4AEJBW5300A3LJ	30	700	27	824	43	2.81	24	29	30	45	42	37.5	20.3
C4AEJBW5450A3MJ	45	700	19	833	45	3.04	31	29	30	45	57.5	52.5	20.3
C4AEJBW5550A3NJ	55	700	19	1018	48	2.60	36	29	35	50	57.5	52.5	20.3

SERIES C4AE 900V

Code	C	Un	DV/dt	Ipkr	ESL	ESR (mΩ)	Irms (A)	Irms (A)	DIMENSIONS (mm)				
	uF	Vcc	V/us	Ap	nH	100 KHz	10 KHz 70°C	100 KHz 70°C	B	H	L	P	P1
						d=1.2 4 wires	d=1.2 4 wires	d=1.2 4 wires					
C4AEOBW5125A3FJ	12.5	900	32	401	41	5.66	14	25	20	40	41.5	37.5	10.2
C4AEOBW5150A3JJ	15	900	32	481	39	4.76	16	29	28	37	42.5	37.5	10.2
C4AEOBW5175A3HJ	17.5	900	32	562	43	4.18	18	29	24	44	41.5	37.5	10.2
C4AEOBW5200A3LJ	20	900	32	642	43	3.71	20	29	30	45	42	37.5	20.3
C4AEOBW5300A3MJ	30	900	22	649	45	3.93	26	29	30	45	57.5	52.5	20.3
C4AEOBW5400A3NJ	40	900	22	866	48	3.09	32	29	35	50	57.5	52.5	20.3