

BOX CAPACITORS AC FILTER APPLICATIONS

C4AF SERIES RoHS COMPLIANT

METALLIZED POLYPROPYLENE CAPACITORS FOR PCB APPLICATIONS

GENERAL TECHNICAL DATA

All dimensions are in mm

Reference Standards : IEC 61071 – EN 61071 - VDE 0560-12

Dielectric : Metallized Polypropylene Film
Protected

Winding : Non-inductive type

Case components: Solvent resistant plastic case flame
Retardant execution UL94 V0,
Epoxy resin sealing.

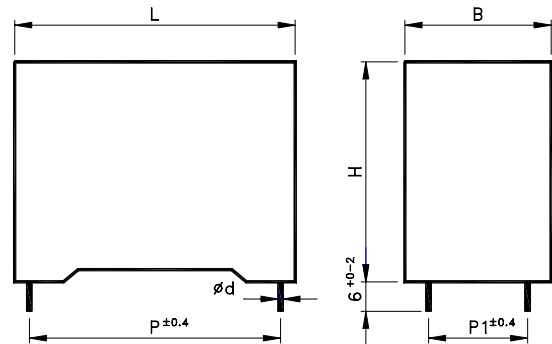
Terminals: Tinned copper (1 + 1) or 2 + 2 wires (See figure).
 $\varnothing d = 1.2 \text{ mm}$ (16 AWG)

IEC climatic category : -40/85/21 according to IEC 68-1

Temperature range (Case): -40 to 85 °C

Temperature storage (Case): -40 to + 105 °C

Installation: Whatever position



TEST METHODS AND PERFORMANCES

Test voltage terminal to terminal (Utt)	1.5 x Un for 10s or 1.65 x Un for 2s at 25°C
Test voltage terminal to case (Utc)	2 x Un + 1000Vac or 2000Vac whichever is the highest value at 50Hz for 10 sec.
Overvoltage	1.3 x Un for 1 min, maximum duration within one day
Damp heat, steady state	In accordance with IEC 60068-2-3 (test Ca).
Change of temperature	In accordance with test Nb of IEC 60068-2-14
Life expectancy	≥ 60.000 hours at Un
Failure quota	300/10 ⁹ components hours
Failure criteria	Short or open circuit Capacitance change: > 10 %; DF change: > 2 x initial value
Capacitance deviation in temperature range (-40..+85°C)	± 2% max on capacitance value at 25°C
Changes of capacitance versus operating time	-5% after 60000 hours at Un

ELECTRICAL CHARACTERISTICS

Capacitance	0.8 ÷ 75 µF
Tolerance	± 5 % (J)
Max Ambient Temperature	+ 85 °C
Rated Voltage (50-60 Hz)	250 ÷ 450Vac
Insulation Resistance	≥ 3000 MΩ x µF

PACKING UNITS

Box dimensions	N° of pieces		Box dimensions	N° of pieces	
10x20x32	288		13x22x32	234	
14x28x32	96		18x33x32	80	
22x37x32	64		20x40x41.5	58	
28x37x42.5	36		30x45x42	36	
30x45x57.5	27		35x50x57.5	23	

SERIES C4AF 250Vac MKP

Code	C UF	Un Vac 50Hz	Max DV/dt V/us	Max Ipkr Ap	ESL nH	ESR (mΩ) 10 KHz d=1.2		Max Irms A at 10 KHz and 60°C d=1.2		Weight gr	DIMENSIONS (mm)				
						2 wires	4 wires	2 wires	4 wires		B	H	L	P	P1
C4AF1BU4250A3AJ	2.5	250	27	68	24	14.1		4		10	10	20	32	27.5	/
C4AF1BU4400A3BJ	4	250	27	109	25	9.1		6		14.5	13	22	32	27.5	/
C4AF1BU4630A3CJ	6.3	250	27	172	26	6.1		8		19.5	14	28	32	27.5	/
C4AF1BU5100A3EJ	10	250	27	270	27	4.2		11		28.5	18	33	32	27.5	/
C4AF1BU5150A3GJ	15	250	27	410	28	3.1		14		38	22	37	32	27.5	/
C4AF1BW5220A3FJ	22	250	19	407	30		3.2		15	46.5	20	40	41.5	37.5	10.2
C4AF1BW5250A3JJ	25	250	19	463	30		2.9		17	62.5	28	37	42.5	37.5	10.2
C4AF1BW5400A3LJ	40	250	19	742	33		1.9		23	77	30	45	42	37.5	20.3
C4AF1BW5550A3MJ	55	250	12	687	35		2.7		21	102	30	45	57.5	52.5	20.3
C4AF1BW5750A3NJ	75	250	12	937	38		2.1		26	130	35	50	57.5	52.5	20.3

SERIES C4AF 300Vac MKP

Code	C UF	Un Vac 50Hz	Max DV/dt V/us	Max Ipkr Ap	ESL nH	ESR (mΩ) 10 KHz d=1.2		Max Irms A at 10 KHz and 60°C d=1.2		Weight gr	DIMENSIONS (mm)				
						2 wires	4 wires	2 wires	4 wires		B	H	L	P	P1
C4AF6BU4200A3AJ	2	300	31	62	24	15.6		4		10.5	10	20	32	27.5	/
C4AF6BU4330A3BJ	3.3	300	31	102	25	9.7		6		14.5	13	22	32	27.5	/
C4AF6BU4500A3CJ	5	300	31	156	26	6.7		7		19.5	14	28	32	27.5	/
C4AF6BU4800A3EJ	8	300	31	250	27	4.6		10		28.5	18	33	32	27.5	/
C4AF6BU5120A3GJ	12	300	31	375	28	3.5		13		38	22	37	32	27.5	/
C4AF6BW5160A3FJ	16	300	21	339	30		3.9		14	47	20	40	41.5	37.5	10.2
C4AF6BW5200A3JJ	20	300	21	423	30		3.1		16	62	28	37	42.5	37.5	10.2
C4AF6BW5300A3LJ	30	300	21	636	33		2.2		21	77	30	45	42	37.5	20.3
C4AF6BW5400A3MJ	40	300	14	571	35		3.2		19	103	30	45	57.5	52.5	20.3
C4AF6BW5550A3NJ	55	300	14	785	38		2.5		24	132	35	50	57.5	52.5	20.3

SERIES C4AF 350Vac MKP

Code	C uF	Un Vac 50Hz	Max DV/dt V/us	Max Ipkr Ap	ESL nH	ESR (mΩ) 10 KHz d=1.2		Max Irms A at 10 KHz and 60°C d=1.2		Weight gr	DIMENSIONS (mm)				
						2 wires	4 wires	2 wires	4 wires		B	H	L	P	P1
C4AF7BU4120A3AJ	1.2	350	38	46	24	21.2		3		10.5	10	20	32	27.5	/
C4AF7BU4220A3BJ	2.2	350	39	85	25	11.9		5		14.5	13	22	32	27.5	/
C4AF7BU4330A3CJ	3.3	350	39	128	26	8.2		7		19	14	28	32	27.5	/
C4AF7BU4500A3EJ	5	350	39	195	27	5.8		9		28.5	18	33	32	27.5	/
C4AF7BU4750A3GJ	7.5	350	39	293	28	4.5		12		38	22	37	32	27.5	/
C4AF7BW5100A3FJ	10	350	26	264	30		4.9		12	47	20	40	41.5	37.5	10.2
C4AF7BW5140A3JJ	14	350	26	370	30		3.6		15	61	28	37	42.5	37.5	10.2
C4AF7BW5200A3LJ	20	350	26	524	33		2.6		19	77	30	45	42	37.5	20.3
C4AF7BW5260A3MJ	26	350	18	464	35		3.9		18	103	30	45	57.5	52.5	20.3
C4AF7BW5350A3NJ	35	350	18	625	38		3.0		22	132	35	50	57.5	52.5	20.3

SERIES C4AF 400Vac MKP

Code	C uF	Un Vac 50Hz	Max DV/dt V/us	Max Ipkr Ap	ESL nH	ESR (mΩ) 10 KHz d=1.2		Max Irms A at 10 KHz and 60°C d=1.2		Weight gr	DIMENSIONS (mm)				
						2 wires	4 wires	2 wires	4 wires		B	H	L	P	P1
C4AF3BU3820A3AJ	0.82	400	46	38	24	26.5		3		10.5	10	20	32	27.5	/
C4AF3BU4150A3BJ	1.5	400	46	70	25	14.8		4		14.5	13	22	32	27.5	/
C4AF3BU4220A3CJ	2.2	400	47	102	26	10.4		6		19.5	14	28	32	27.5	/
C4AF3BU4350A3EJ	3.5	400	47	163	27	6.9		8		28.5	18	33	32	27.5	/
C4AF3BU4500A3GJ	5	400	47	234	28	5.5		11		38	22	37	32	27.5	/
C4AF3BW4750A3FJ	7.5	400	32	238	30		5.5		11	47	20	40	41.5	37.5	10.2
C4AF3BW5100A3JJ	10	400	32	317	30		4.5		14	61	28	37	42.5	37.5	10.2
C4AF3BW5130A3LJ	13	400	32	413	33		3.5		17	77.5	30	45	42	37.5	20.3
C4AF3BW5180A3MJ	18	400	21	385	35		4.7		16	103	30	45	57.5	52.5	20.3
C4AF3BW5250A3NJ	25	400	21	535	38		3.5		20	131	35	50	57.5	52.5	20.3

SERIES C4AF 450Vac MKP

Code	C uF	Un Vac 50Hz	Max DV/dt V/us	Max Ipkr Ap	ESL nH	ESR (mΩ) 10 KHz d=1.2		Max Irms A at 10 KHz and 60°C d=1.2		Weight gr	DIMENSIONS (mm)				
						2 wires	4 wires	2 wires	4 wires		B	H	L	P	P1
C4AF5BU3500A3AJ	0.5	450	61	30	24	34.5		3		10.5	10	20	32	27.5	/
C4AF5BU3820A3BJ	0.82	450	61	50	25	21.5		4		14.5	13	22	32	27.5	/
C4AF5BU4120A3CJ	1.2	450	62	74	26	15		5		19.5	14	28	32	27.5	/
C4AF5BU4200A3EJ	2	450	62	124	27	9.5		7		28.5	18	33	32	27.5	/
C4AF5BU4300A3GJ	3	450	62	187	28	6.5		10		37.5	22	37	32	27.5	/
C4AF5BW4400A3FJ	4	450	42	169	30		8		10	47	20	40	41.5	37.5	10.2
C4AF5BW4550A3JJ	5.5	450	42	232	29		6		12	61	28	37	42.5	37.5	10.2
C4AF5BW4750A3LJ	7.5	450	42	317	33		4.5		15	77	30	45	42	37.5	20.3
C4AF5BW5100A3MJ	10	450	29	285	35		6.5		14	103	30	45	57.5	52.5	20.3
C4AF5BW5140A3NJ	14	450	29	399	38		4.6		17	131	35	50	57.5	52.5	20.3