



# Series C72 AC Filter Capacitors

**Features:** Flame retardant to UL94, extended metallized film, dry construction, aluminum case with resin sealing, copper nut or screw leads, high current, high capacitance, low losses, low inductance, self healing.

**Applications:** Widely used in power electronic equipment, AC filter applications.

## Specifications

**1) Reference Standards**

GB/T 17702 IEC 61701  
GB/T 12747

**2) Operating Temperature**

-40°C to 85°C.

**3) Capacitance**

8.0 µF to 350 µF.

**4) Rated Voltage**

250 VAC to 690 VAC  
(400 VDC to 1600 VDC)

**5) Tolerance**

±5% ±10%

**6) Test Voltage Between Terminals**

2 x rated DC voltage 10s 25°C ± 5°C.

**7) Test Voltage Between Terminals and Case**

3000 V 50Hz 60s, 25°C ± 5°C.

**8) Dissipation Factor**

$tg\delta \leq 20 \times 10^{-4}$  at 25°C ± 5°C, 100 Hz.

**9) Insulation Resistance**

C - R ≥ 5000S, at 100 VDC, 25°C ± 5°C, 60s

**10) Life Expectancy**

200000h at rated voltage and 70°C

### Surge Voltage Limits

Surge Voltage (VDC)	Max Duration
1.1 x Rated	30% of service period
1.15 x Rated	30 min./day
1.2 x Rated	5 min./day
1.3 x Rated	1 min./day
1.5 x Rated	100mS/day; no more than 1000 times

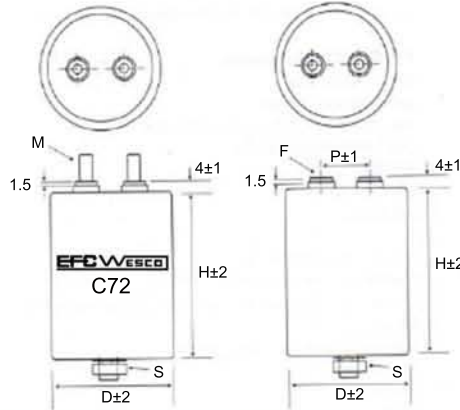


Please consult factory for special requirements, including non-standard values and sizes

# C72

Aluminum Case  
with Resin Sealing

# AC Filter Capacitors



## Dimensions and Ratings

Case	Terminals					Stud Mounting	
	M	Torque	F	Torque	P	S	Torque
D=55			M5 X 20	2.5N. M max	22.0	M10 X 12	6.0N. M max
D=60, 65			M5 X 20	2.5N. M max	28.5	M12 X 16	8.0N. M max
D=76,86	M8 X 20	8.5N. M max	M6 X 20	4.5N. M max	32.0		

Cap.	400 VDC (250 VAC)						
µF	Part #	Dimension (mm)			I <sub>rms</sub> max A	ESR (mΩ)	RTH (k/W)
		D	H	P			
30	C72SC251306K***#	55	55	22.0	27	2.8	9.7
50	C72SC251506K***#	55	70	22.0	29	3.0	8.1
60	C72SC251606K***#	60	70	28.5	31	2.7	7.5
70	C72SC251706K***#	65	70	28.5	34	2.5	7.0
100	C72SC251107K***#	60	125	22.0	44	2.2	5.0
120	C72SC251127K***#	60	125	28.5	47	2.0	4.5
130	C72SC251137K***#	65	125	28.5	49	2.0	4.3
150	C72SC251157K***#	76	125	32.0	53	1.9	3.7
200	C72SC251207K***#	86	125	32.0	59	2.8	3.3
250	C72SC251257K***#	76	180	32.0	68	1.7	2.6
350	C72SC251357K***#	86	180	32.0	74	1.6	2.3

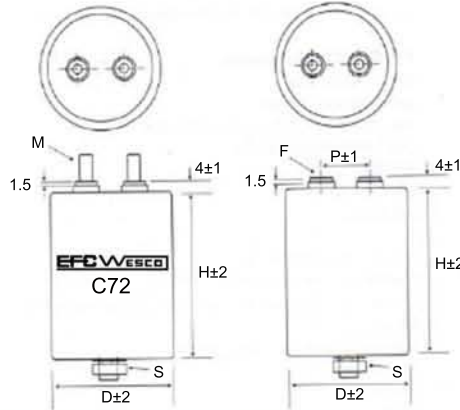


Please consult factory for special requirements, including non-standard values and sizes

# C72

## Aluminum Case with Resin Sealing

# AC Filter Capacitors



## Dimensions and Ratings

Cap.	<b>600 VDC (330 VAC)</b>						
µF	Part #	Dimension (mm)			Irms max A	ESR (mΩ)	RTH (k/W)
		D	H	P			
15	C72SC331156K***#	55	55	22.0	24	3.5	9.7
25	C72SC331256K***#	55	70	22.0	25	4.0	8.1
33	C72SC331336K***#	60	70	28.5	30	3.5	7.5
40	C72SC331406K***#	65	70	28.5	32	3.0	7.0
50	C72SC331506K***#	55	125	22.0	40	2.9	5.0
65	C72SC331656K***#	60	125	28.5	44	2.5	4.5
75	C72SC331756K***#	65	125	28.5	47	2.2	4.3
100	C72SC331107K***#	76	125	32.0	52	2.0	3.7
130	C72SC331137K***#	86	125	32.0	58	1.8	3.3
150	C72SC331157K***#	76	180	32.0	65	1.7	2.6
200	C72SC331207K***#	86	180	32.0	73	1.6	2.3

Cap.	<b>700 VDC (400 VAC)</b>						
µF	Part #	Dimension (mm)			Irms max A	ESR (mΩ)	RTH (k/W)
		D	H	P			
12	C72SC401126K***#	55	55	22.0	24	3.5	9.7
15	C72SC401156K***#	55	70	22.0	23	5.0	8.1
20	C72SC401206K***#	60	70	28.5	25	4.0	7.5
25	C72SC401256K***#	65	70	28.5	30	3.5	7.0
33	C72SC401336K***#	55	125	22.0	38	3.0	5.0
40	C72SC401406K***#	60	125	28.5	40	2.5	4.5
50	C72SC401506K***#	65	125	28.5	45	2.3	4.3
70	C72SC401706K***#	76	125	32.0	50	2.0	3.7
100	C72SC401107K***#	76	180	32.0	65	1.8	2.6
130	C72SC401137K***#	86	180	32.0	70	1.7	2.3

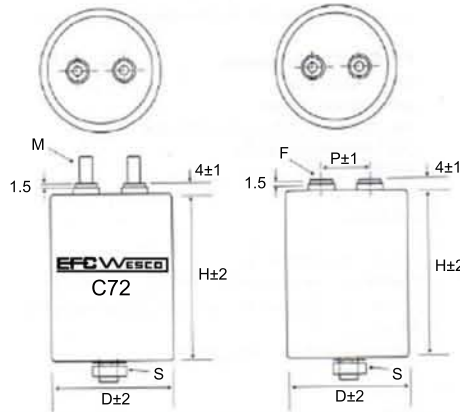


Please consult factory for special requirements, including non-standard values and sizes

# C72

Aluminum Case  
with Resin Sealing

## DC Link Polypropylene Capacitors



### Dimensions and Ratings

Cap.	850 VDC (450 VAC)						
µF	Part #	Dimension (mm)			I <sub>rms</sub> max A	ESR (mΩ)	RTH (kW)
		D	H	P			
8	C72SC451805K***#	55	55	22.0	23	4.0	9.7
12	C72SC4518126K***#	55	70	22.0	23	5.0	8.1
15	C72SC451156K***#	60	70	28.5	25	4.0	7.5
22	C72SC451226K***#	55	125	22.0	35	3.5	5.0
33	C72SC451336K***#	65	125	28.5	40	2.5	4.3
47	C72SC451476K***#	76	125	32.0	50	2.2	3.7
60	C72SC451606K***#	86	125	32.0	55	2.0	3.3
70	C72SC451706K***#	76	180	32.0	62	2.0	2.6
90	C72SC451906K***#	86	180	32.0	70	1.8	2.3

Cap.	1200 VDC (500 VAC)						
µF	Part #	Dimension (mm)			I <sub>rms</sub> max A	ESR (mΩ)	RTH (kW)
		D	H	P			
20	C72SC501206K***#	60	85	28.5	29	3.4	4.9
30	C72SC501306K***#	65	85	28.5	45	1.7	4.0
40	C72SC501406K***#	76	85	32.0	42	2.0	3.7
50	C72SC501506K***#	76	85	32.0	61	1.1	3.4
60	C72SC501606K***#	76	105	32.0	57	1.3	3.2
70	C72SC501706K***#	76	15	32.0	53	1.7	2.9
80	C72SC501806K***#	76	155	32.0	73	1.0	2.6
90	C72SC501906K***#	76	155	32.0	80	0.9	2.5
100	C72SC501107K***#	76	200	32.0	85	0.8	2.3
120	C72SC501127K***#	76	200	32.0	97	0.6	1.9
133	C72SC501137K***#	76	200	32.0	100	0.4	1.8
150	C72SC501157K***#	86	240	32.0	86	0.9	2.0
180	C72SC501187K***#	86	240	32.0	99	0.6	1.8
200	C72SC501207K***#	86	240	32.0	102	0.5	1.6
220	C72SC501227K***#	86	240	32.0	106	0.4	1.4
250	C72SC501257K***#	86	240	32.0	110	0.3	1.2

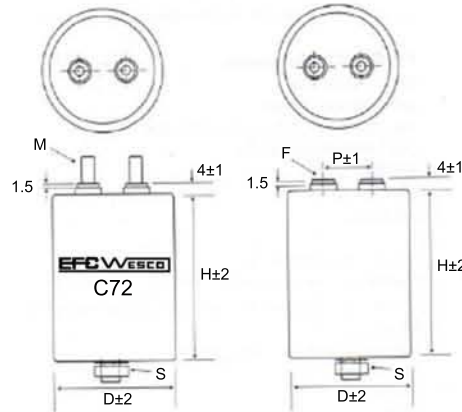


Please consult factory for special requirements, including non-standard values and sizes

# C72

Aluminum Case  
with Resin Sealing

## DC Link Polypropylene Capacitors



### Dimensions and Ratings

Cap.	1600 VDC (690 VAC)						
µF	Part #	Dimension (mm)			Irms max A	ESR (mΩ)	RTH (k/W)
		D	H	P			
5	C72SC691505K***#	60	85	28.5	28	3.5	4.5
10	C72SC691106K***#	60	85	28.5	30	3.7	4.2
15	C72SC691156K***#	65	85	28.5	49	2.5	3.2
20	C72SC691206K***#	65	105	28.5	48	1.8	3.2
30	C72SC691306K***#	76	105	32.0	50	2.4	2.9
40	C72SC691406K***#	76	155	32.0	74	1.2	2.1
50	C72SC691506K***#	76	155	32.0	69	1.4	2.0
60	C72SC691606K***#	76	200	32.0	93	0.9	1.7
70	C72SC691706K***#	86	200	32.0	86	1.1	1.6
100	C72SC691107K***#	86	200	32.0	100	1.4	1.6
120	C72SC691127K***#	86	240	32.0	29	6.0	3.5
133	C72SC691137K***#	86	240	32.0	34	5.5	3.5
180	C72SC691187K***#	116	240	50.0	35	5.0	3.3
200	C72SC691207K***#	116	240	50.0	39	4.8	3.3