



# Series C51

## DC-Link Polypropylene Capacitors

**Features:** Flame retardant to UL94, extended metalized film, dry connection, aluminum case with resin sealing, copper nut or screw terminals, high stability, low ESR and ESL, self healing.

**Applications:** DC-link and filter for UPS, SMPSs, inverter, welding machine power.

### Specifications

**1) Operating Temperature**

-40°C to 85°C.

**2) Capacitance**

80µF to 4000µF

**3) Rated Voltage**

500 VDC to 2000 VDC.

**4) Tolerance**

±5% or ±10%.

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

3000V 50Hz 60s, 25°C±5°C.

**6) Test Voltage Between Terminals**

1.5 rated DC voltage 10s 25°C±5°C.

**7) Dissipation Factor**

0.2% max at 25°C±5°C, 100Hz

**8) Insulation Resistance**

5000 MΩ•µF min, at 100 VDC, 25°C±5°C, 60s

**9) Life Expectancy**

200000h at rated DC voltage and 70°C.

**10) Reference Standards**

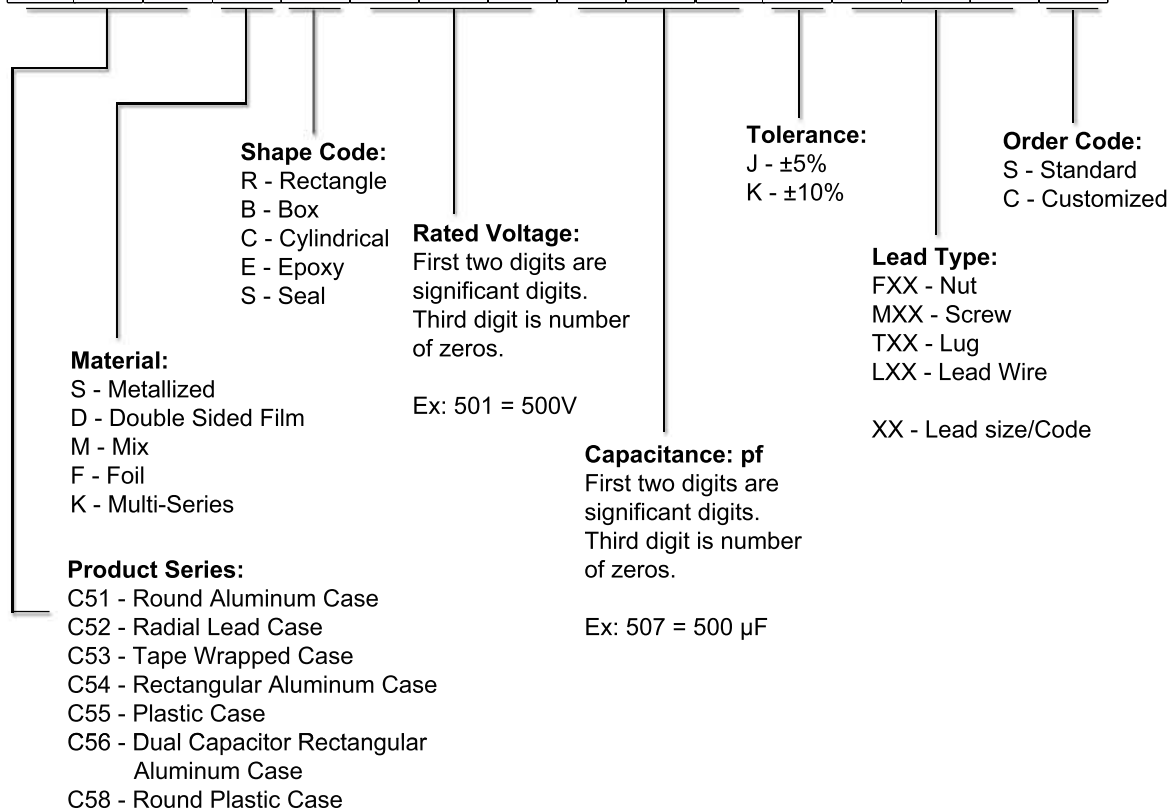
GB/T 17702, IEC 61071

### 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

# DC Link Nomenclature

**C 5 1 S C 5 0 1 5 0 7 K T X X C**





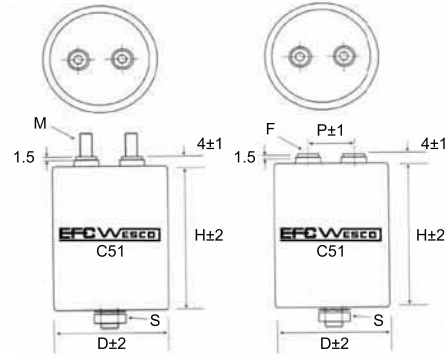
Please consult factory for special requirements, including non-standard values and sizes

# C51

## Round Aluminum Case

# DC Link Polypropylene Capacitors

## Dimensions and Ratings



Case	Terminals					Stud Mounting	
	M	Torque	F	Torque	P	S	Torque
D=55	M5 X 20	2.8N. M max	M5 X 8	3.5N. M max	22.0	M10 X 12	6.0N. M max
D=60, 65	M6 X 20	3.8N. M max	M6 X 9	4.5N. M max	28.5	M12 X 16	10.0N. M max
D=76,86	M8 X 20	8.5N. M max	M6 X 9	4.5N. M max	32.0		
D=96, 116	M8 X 20	8.5N. M max	M6 X 9	4.5N. M max	50.0	M12X16	10.0N. M max

Cap.	500 VDC					
μF	Part #	Dimension (mm)			Irms Max A	ESR (mΩ)
		D	H	P		
400	C51SC501407K***#	65	97	28	50	3.0
500	C51SC501507K***#	65	120	28	60	2.7
500	C51SC501507K***#	76	97	32	60	2.7
750	C51SC501757K***#	76	120	32	80	2.5
750	C51SC501757K***#	86	97	32	80	2.5
1000	C51SC501108K***#	86	120	32	100	2.2
1500	C51SC501158K***#	76	225	32	130	2.0
1800	C51SC501188K***#	116	120	50	150	1.8
2000	C51SC501208K***#	86	225	32	160	1.5
2400	C51SC501248K***#	96	225	45	180	1.2
3000	C51SC501308K***#	96	225	45	210	1.0
3600	C51SC501368K***#	116	225	50	280	0.8
4000	C51SC501408K***#	116	225	50	300	0.5

Cap.	800 VDC					
μF	Part #	Dimension (mm)			Irms Max A	ESR (mΩ)
		D	H	P		
430	C51SC801437K***#	76	120	32	40	4.5
550	C51SC801557K***#	86	120	32	46	4.0
800	C51SC801807K***#	76	225	32	67	3.0
1000	C51SC801108K***#	86	225	32	76	2.6



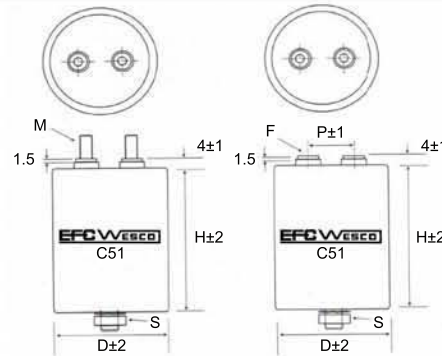
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## Round Aluminum Case

# DC Link Polypropylene Capacitors

## Dimensions and Ratings



Cap.		<b>1000 VDC</b>				
µF	Part #	Dimension (mm)			Irms Max A	ESR (mΩ)
		D	H	P		
270	C51SC102277K***#	76	120	32	37	5.0
350	C51SC102357K***#	86	120	32	43	4.3
500	C51SC102507K***#	76	225	32	63	3.3
680	C51SC102687K***#	86	225	32	73	3.0

Cap.		<b>1200 VDC</b>				
µF	Part #	Dimension (mm)			Irms Max A	ESR (mΩ)
		D	H	P		
200	C51SC122207K***#	76	120	32	35	5.5
250	C51SC122257K***#	86	120	32	41	4.9
370	C51SC122377K***#	76	225	32	61	3.5
470	C51SC122477K***#	86	225	32	70	3.0

Cap.		<b>1400 VDC</b>				
µF	Part #	Dimension (mm)			Irms Max A	ESR (mΩ)
		D	H	P		
140	C51SC142147K***#	76	120	32	33	6.5
180	C51SC142187K***#	86	120	32	38	5.5
270	C51SC142277K***#	76	225	32	58	4.5
350	C51SC142357K***#	86	225	32	66	3.5



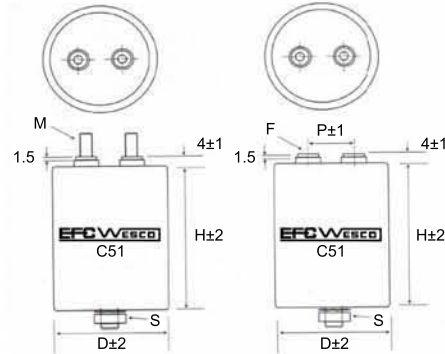
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# DC Link Polypropylene Capacitors

## Dimensions and Ratings



Cap.	<b>1600 VDC</b>					
µF	Part #	Dimension (mm)			Irms Max A	ESR (mΩ)
		D	H	P		
100	C51SC162107K***#	76	120	32	30	7.5
140	C51SC162147K***#	86	120	32	36	6.0
200	C51SC162207K***#	76	225	32	54	4.5
270	C51SC162277K***#	86	225	32	64	3.8

Cap.	<b>1800 VDC</b>					
µF	Part #	Dimension (mm)			Irms Max A	ESR (mΩ)
		D	H	P		
80	C51SC182806K***#	76	120	32	29	8.5
110	C51SC182117K***#	86	120	32	35	6.5
160	C51SC182167K***#	76	225	32	52	4.8
200	C51SC182207K***#	86	225	32	60	4.1

Cap.	<b>2000 VDC</b>					
µF	Part #	Dimension (mm)			Irms Max A	ESR (mΩ)
		D	H	P		
130	C51SC202137K***#	76	225	32	36	10.5
170	C51SC202177K***#	86	225	32	42	8.5