

# Type SF Lighting Capacitors, 90 °C Rated, Oil Filled

## AC Rated, Oil Filled/Impregnated, Metallized Polypropylene Capacitors



For better performance in HID Lighting and HV Ballasts, Type SF oval and round oil filled metallized polypropylene lighting capacitors are built for operating in the high temperature environments for high intensity discharge (HID) lighting and other high voltage ballast applications. Each HID catalog capacitor includes an external resistor that discharges the capacitor to less than 50V in one minute, and the oil filled process assures better reliability than dry capacitors.

### Highlights

- Casing: aluminum standard, tin-plated steel optional
- Paint: (U. L. recognized) optional
- Meets EIA Standard EIA-456-A

### Specifications

Capacitance Range	5.0 $\mu$ F to 55 $\mu$ F
Capacitance Tolerance	$\pm$ 3%
Rated Voltage	280 Vac to 525 Vac, other voltages available
Operating Temperature Range with Ripple	-40 °C to +90 °C
Operating Frequency	50 - 60 Hz
RoHS Compliant	

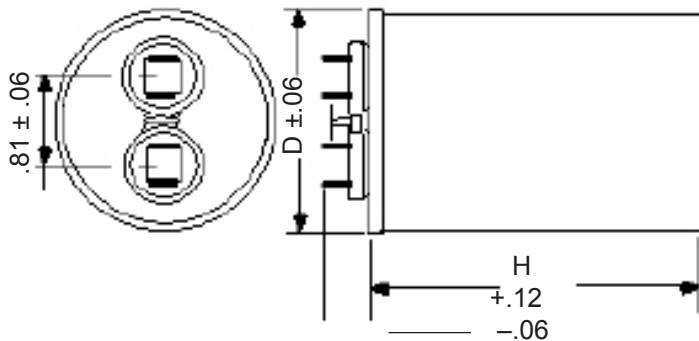
### Dimensions

[Click here to view hardware](#)

#### Construction Details

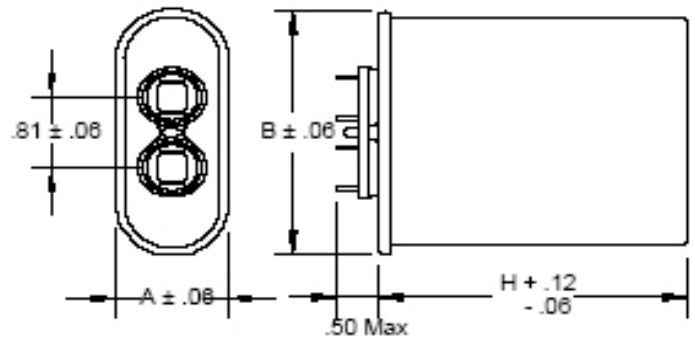
Case Material	Aluminum or Tin Plated Steel
Encapsulation	Environmentally Safe Dielectric Fluid
Terminal Material	Tin Plated Steel

#### Round Case Style



Case Code	D (Inches)	H
P	1.87	See Ratings Table
S	2.12	See Ratings Table
T	2.62	See Ratings Table

#### Oval Case Style



Case Code	Dimensions (Inches)		
	A	B	H
A	1.31	2.16	See Ratings Table
B	1.56	2.69	See Ratings Table
C	1.91	2.91	See Ratings Table
D	1.97	3.66	See Ratings Table

### Part Numbering System

SF	C	40	T	15	L	291	K	-F
Type	Case Size	Voltage	Case Matl.	Cap	Tolerance	Can Height	Terminals	RoHS
SF	A = 1 1/4" Oval B = 1 1/2" Oval C = 1 3/4" Oval D = 2.0" Oval P = 1 3/4" Round S = 2.0" Round T = 2 1/2" Round	28 = 280 Vac 30 = 300 Vac 33 = 330 Vac 40 = 400 Vac 48 = 480 Vac 52 = 525 Vac	T=Aluminum w/steel cover S = Steel	7 = 7.0 $\mu$ F 32 = 32.0 $\mu$ F 19.5 = 19.5 $\mu$ F	L = $\pm$ 3%	291 = 2.91 391 = 3.91	K = 2-tine with fork and external resistor, 90 °C	Compliant

# Type SF Lighting Capacitors, 90 °C Rated, Oil Filled

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### Oval Ratings

Cap. (µF)	Case Code	Aluminum Catalog Part Number	H (inches)	Steel Catalog Part Number*	H (Inches)
<b>280V</b>					
5.0	A	SFA28T5L156K-F	1.56	SFA28S5L156K-F	1.56
7.0	A	SFA28T7L156K-F	1.56	SFA28S7L156K-F	1.56
10.0	A	SFA28T10L288K-F	2.88	SFA28S10L288K-F	2.88
12.0	A	SFA28T12L288K-F	2.88	SFA28S12L288K-F	2.88
14.0	A	SFA28T14L288K-F	2.88	SFA28S14L288K-F	2.88
17.5	C	SFC28T17.5L291K-F	2.91	SFC28S17.5L291K-F	2.91
20.0	C	SFC28T20L291K-F	2.91	SFC28S20L291K-F	2.91
35.0	C	SFC28T35L291K-F	2.91	SFC28S35L291K-F	2.91
48.0	C	SFC28T48L391K-F	3.91	SFC28S48L391K-F	3.91
55.0	C	SFC28T55L391K-F	3.91	SFC28S55L391K-F	3.91
<b>300V</b>					
10.0	A	SFA30T10L288K-F	2.88	SFA30S10L288K-F	2.88
12.0	A	SFA30T12L288K-F	2.88	SFA30S12L288K-F	2.88
14.0	A	SFA30T14L288K-F	2.88	SFA30S14L288K-F	2.88
16.0	C	SFC30T16L291K-F	2.91	SFC30S16L291K-F	2.91
20.0	C	SFC30T20L291K-F	2.91	SFC30S20L291K-F	2.91
<b>330V</b>					
22.5	C	SFC33T22.5L291K-F	2.91	SFC33S22.5L291K-F	2.91
24.0	C	SFC33T24L291K-F	2.91	SFC33S24L291K-F	2.91
26.0	C	SFC33T26L291K-F	2.91	SFC33S26L291K-F	2.91
28.0	C	SFC33T28L291K-F	2.91	SFC33S28L291K-F	2.91
30.0	C	SFC33T30L291K-F	2.91	SFC33S30L291K-F	2.91
<b>400V</b>					
10.0	A	SFA40T10L288K-F	2.88	SFA40S10L288K-F	2.88
15.0	C	SFC40T15L291K-F	2.91	SFC40S15L291K-F	2.91
19.5	C	SFC40T19.5L291K-F	2.91	SFC40S19.5L291K-F	2.91
20.5	C	SFC40T20.5L291K-F	2.91	SFC40S20.5L291K-F	2.91
24.0	C	SFC40T24L391K-F	3.91	SFC40S24L391K-F	3.91
<b>480V</b>					
12.0	C	SFC48T12L291K-F	2.91	SFC48S12L291K-F	2.91
15.0	C	SFC48T15L291K-F	2.91	SFC48S15L291K-F	2.91
18.0	C	SFC48T18L291K-F	2.91	SFC48S18L291K-F	2.91
19.0	C	SFC48T19L291K-F	2.91	SFC48S19L291K-F	2.91
21.0	C	SFC48T21L391K-F	3.91	SFC48S21L391K-F	3.91
24.0	C	SFC48T24L391K-F	3.91	SFC48S24L391K-F	3.91
<b>525V</b>					
16.0	C	SFC52T16L391K-F	3.91	SFC52S16L391K-F	3.91
26.0	D	SFD52T26L391K-F	3.91	SFD52S26L391K-F	3.91
32.0	D	SFD52T32L391K-F	3.91	SFD52S32L391K-F	3.91

### Round Ratings

Cap. (µF)	Case Code	Aluminum Catalog Part Number	H (inches)	Steel Catalog Part Number*	H (Inches)
<b>280V</b>					
5.0	P	SFP28T5L238K-F	2.38	SFP28S5L238K-F	2.38
7.0	P	SFP28T7L238K-F	2.38	SFP28S7L238K-F	2.38
10.0	P	SFP28T10L238K-F	2.38	SFP28S10L238K-F	2.38
12.0	P	SFP28T12L238K-F	2.38	SFP28S12L238K-F	2.38
14.0	P	SFP28T14L238K-F	2.38	SFP28S14L238K-F	2.38
17.5	P	SFP28T17.5L238K-F	2.38	SFP28S17.5L238K-F	2.38
20.0	P	SFP28T20L284K-F	2.84	SFP28S20L288K-F	2.88
35.0	P	SFP28T35L284K-F	2.84	SFP28S35L288K-F	2.88
48.0	P	SFP28T48L384K-F	3.84	SFP28S48L375K-F	3.75
55.0	S	SFS28T55L384K-F	3.84	SFS28S55L375K-F	3.75
<b>300V</b>					
10.0	P	SFP30T10L238K-F	2.38	SFP30S10L238K-F	2.38
12.0	P	SFP30T12L238K-F	2.38	SFP30S12L238K-F	2.38
14.0	P	SFP30T14L238K-F	2.38	SFP30S14L238K-F	2.38
16.0	P	SFP30T16L238K-F	2.38	SFP30S16L238K-F	2.38
20.0	P	SFP30T20L238K-F	2.38	SFP30S20L238K-F	2.38
<b>330V</b>					
22.5	P	SFP33T22.5L284K-F	2.84	SFP33S22.5L288K-F	2.88
24.0	P	SFP33T24L284K-F	2.84	SFP33S24L288K-F	2.88
26.0	P	SFP33T26L284K-F	2.84	SFP33S26L288K-F	2.88
28.0	P	SFP33T28L284K-F	2.84	SFP33S28L288K-F	2.88
30.0	P	SFP33T30L284K-F	2.84	SFP33S30L288K-F	2.88
<b>400V</b>					
10.0	P	SFP40T10L284K-F	2.84	SFP40S10L288K-F	2.88
15.0	P	SFP40T15L284K-F	2.84	SFP40S15L288K-F	2.88
19.5	P	SFP40T19.5L284K-F	2.84	SFP40S19.5L288K-F	2.88
20.5	P	SFP40T20.5L284K-F	2.84	SFP40S20.5L288K-F	2.88
24.0	P	SFP40T24L384K-F	3.84	SFP40S24L375K-F	3.75
<b>480V</b>					
12.0	P	SFP48T12L284K-F	2.84	SFP48S12L288K-F	2.88
15.0	P	SFP48T15L284K-F	2.84	SFP48S15L288K-F	2.88
18.0	S	SFS48T18L291K-F	2.91	SFS48S18L288K-F	2.88
19.0	S	SFS48T19L291K-F	2.91	SFS48S19L288K-F	2.88
21.0	S	SFS48T21L291K-F	2.91	SFS48S21L288K-F	2.88
24.0	P	SFP48T24L384K-F	3.84	SFP48S24L375K-F	3.75
<b>525V</b>					
16.0	S	SFS52T16L291K-F	2.91	SFS52S16L288K-F	2.88
26.0	T	SFT52T26L391K-F	3.91	SFT52S26L391K-F	3.91
32.0	T	SFT52T32L391K-F	3.91	SFT52S32L391K-F	3.91

\*Steel cases are not for new design. Check parametric search for product availability.

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