

# Type SF Dual, Round & Oval, Oil-Filled Motor Run Capacitors

## Metallized Polypropylene



Type SF dual rated oil filled motor run capacitors made with self-healing metallized polypropylene film are commonly used in air conditioning, motors and compressor applications. The dual ratings in a single can provide two capacitors - one may be used as a fan capacitor and the other as a compressor or motor run capacitor. Three terminals allow one terminal to act as a common while the other two are connected to the individual capacitors.

### Highlights

- Fault current protection up to 10,000 A
- Low energy consumption — <0.1% DF
- Self healing
- UL recognized under E71645
- Meets EIA Standard EIA-456-A
- 60,000 hours life

### Specifications

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|                                         |                                                       |
|-----------------------------------------|-------------------------------------------------------|
| Capacitance Range                       | 15–5 $\mu$ F to 80–10 $\mu$ F                         |
| Capacitance Tolerance                   | $\pm$ 10% standard ( $\pm$ 6% and $\pm$ 3% available) |
| Rated Voltage                           | 370 Vac and 440 Vac                                   |
| Operating Temperature Range with Ripple | –40 °C to 70 °C                                       |
| RoHS Compliant                          |                                                       |

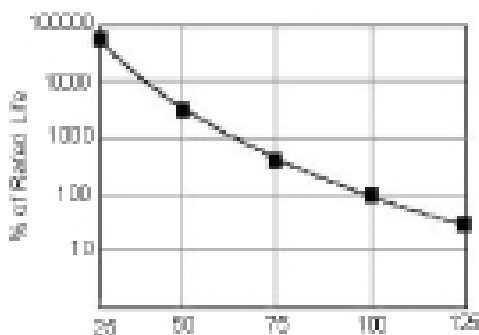
### Service Life Objective

The service life objective for this series is 60,000 hours of operating life with a 94% survival rate when operated at full voltage, 60 Hz, and rated ambient temperature. AC capacitors are frequently used at voltages and ambient temperatures other than rated conditions. Service life may be estimated under specific conditions of temperature and voltage by using the curves as shown below and to the right.

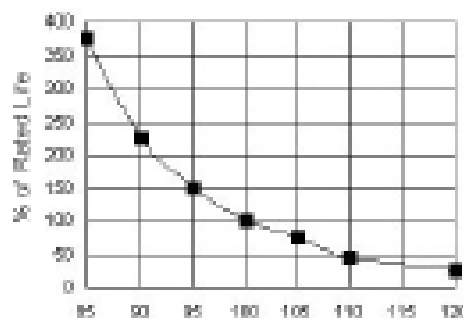
### Capacitance vs. Temperature

The Capacitance vs. Temperature curve may be used to determine the capacitance change as a function of temperature. Capacitance varies by no more than  $\pm$ 3% over the operating temperature range.

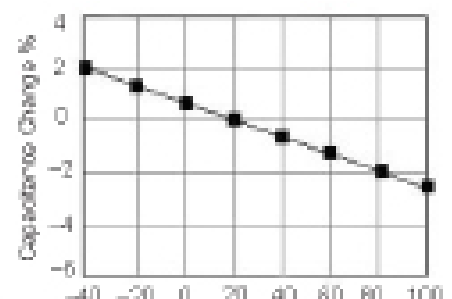
Life vs. Temperature



Life vs. Voltage



Capacitance vs. Temperature



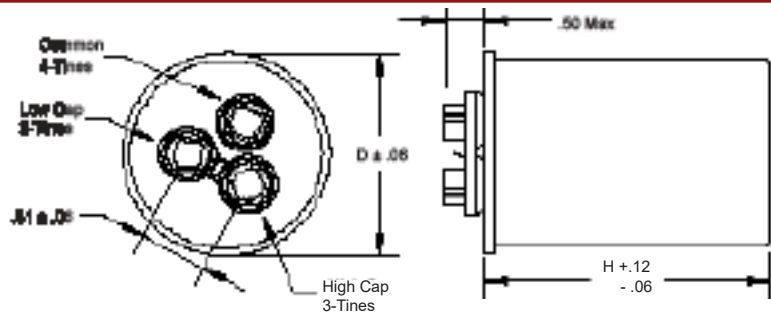
### Part Numbering System

| SF   | C                | 37           | T             | 15-5                    | K             | 291         | E                    | -F             |
|------|------------------|--------------|---------------|-------------------------|---------------|-------------|----------------------|----------------|
| Type | Case             | AC Volt      | Case Material | Cap                     | Tol. $\pm$ %  | Can Height  | VAR                  | RoHS           |
| SF   | C = 1 3/4" Oval  | 37 = 370 Vac | T = Aluminum  | 15-5 = 15-5 $\mu$ F     | L = $\pm$ 3%  | 300 = 3.00" | E = Dual 2,3,4 70 °C | Compliant      |
|      | D = 2.0" Oval    | 44 = 440 Vac | w/steel cover | 30-20 = 30-20 $\mu$ F   | H = $\pm$ 6%  | 388 = 3.88" | Z = Other            | -F = Compliant |
|      | S = 2.0" Round   | X = Other    |               | 50-7.5 = 50-7.5 $\mu$ F | K = $\pm$ 10% | 400 = 4.00" |                      |                |
|      | T = 2 1/2" Round |              |               |                         | Z = +10 –5%   | 475 = 4.75" |                      |                |
|      |                  |              |               |                         | X = Special   |             |                      |                |

# Type SF Dual, Round & Oval, Oil-Filled Motor Run Capacitors

## Type SF Dual Round

| Case Code | D (Inches) | H                 |
|-----------|------------|-------------------|
| S         | 2.12       | See Ratings Table |
| T         | 2.62       | See Ratings Table |



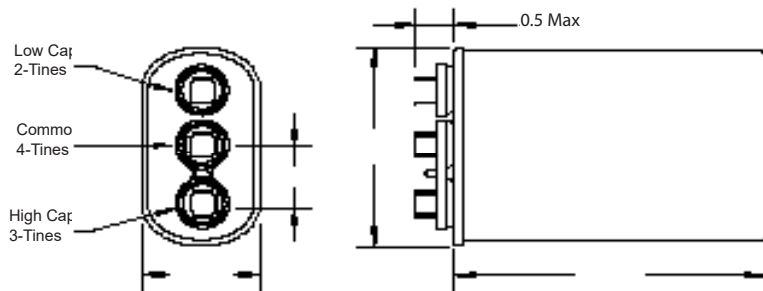
## Ratings

| Cap (μF-μF) | Case Code | Aluminum Catalog Part Number | H (in) |
|-------------|-----------|------------------------------|--------|
| <b>370V</b> |           |                              |        |
| 15-5        | S         | SFS37T15-5K291E-F            | 2.91   |
| 15-10       | S         | SFS37T15-10K291E-F           | 2.91   |
| 20-5        | S         | SFS37T20-5K291E-F            | 2.91   |
| 20-7.5      | S         | SFS37T20-7.5K291E-F          | 2.91   |
| 20-10       | S         | SFS37T20-10K291E-F           | 2.91   |
| 25-5        | S         | SFS37T25-5K291E-F            | 2.91   |
| 25-7.5      | S         | SFS37T25-7.5K291E-F          | 2.91   |
| 25-10       | S         | SFS37T25-10K291E-F           | 2.91   |
| 25-15       | S         | SFS37T25-15K384E-F           | 3.84   |
| 30-5        | S         | SFS37T30-5K291E-F            | 2.91   |
| 30-7.5      | S         | SFS37T30-7.5K384E-F          | 3.84   |
| 30-10       | S         | SFS37T30-10K384E-F           | 3.84   |
| 30-15       | S         | SFS37T30-15K384E-F           | 3.84   |
| 30-20       | S         | SFS37T30-20K384E-F           | 3.84   |
| 35-5        | S         | SFS37T35-5K384E-F            | 3.84   |
| 35-7.5      | S         | SFS37T35-7.5K384E-F          | 3.84   |
| 35-10       | S         | SFS37T35-10K384E-F           | 3.84   |
| 35-15       | S         | SFS37T35-15K384E-F           | 3.84   |
| 35-20       | S         | SFS37T35-20K475E-F           | 4.75   |
| 40-5        | S         | SFS37T40-5K384E-F            | 3.84   |
| 40-7.5      | S         | SFS37T40-7.5K384E-F          | 3.84   |
| 40-10       | S         | SFS37T40-10K384E-F           | 3.84   |
| 40-15       | S         | SFS37T40-15K475E-F           | 4.75   |
| 45-5        | S         | SFS37T45-5K384E-F            | 3.84   |
| 45-7.5      | S         | SFS37T45-7.5K384E-F          | 3.84   |
| 45-10       | S         | SFS37T45-10K475E-F           | 4.75   |
| 45-15       | S         | SFS37T45-15K475E-F           | 4.75   |
| 50-5        | T         | SFT37T50-5K291E-F            | 2.91   |
| 50-7.5      | T         | SFT37T50-7.5K291E-F          | 2.91   |
| 50-10       | T         | SFT37T50-10K291E-F           | 2.91   |
| 60-5        | T         | SFT37T60-5K291E-F            | 2.91   |
| 60-7.5      | T         | SFT37T60-7.5K291E-F          | 2.91   |
| 60-10       | T         | SFT37T60-10K291E-F           | 2.91   |
| 70-5        | T         | SFT37T70-5K391E-F            | 3.91   |
| 70-7.5      | T         | SFT37T70-7.5K391E-F          | 3.91   |
| 70-10       | T         | SFT37T70-10K391E-F           | 3.91   |
| 80-5        | T         | SFT37T80-5K391E-F            | 3.91   |
| 80-7.5      | T         | SFT37T80-7.5K391E-F          | 3.91   |
| 80-10       | T         | SFT37T80-10K391E-F           | 3.91   |
| <b>440V</b> |           |                              |        |
| 15-5        | S         | SFS44T15-5K291E-F            | 2.91   |
| 15-10       | S         | SFS44T15-10K291E-F           | 2.91   |
| 20-5        | S         | SFS44T20-5K291E-F            | 2.91   |
| 20-7.5      | S         | SFS44T20-7.5K291E-F          | 2.91   |
| 20-10       | S         | SFS44T20-10K291E-F           | 2.91   |
| 25-5        | S         | SFS44T25-5K291E-F            | 2.91   |
| 25-7.5      | S         | SFS44T25-7.5K384E-F          | 3.84   |
| 25-10       | S         | SFS44T25-10K384E-F           | 3.84   |
| 25-15       | S         | SFS44T25-15K384E-F           | 3.84   |
| 30-5        | S         | SFS44T30-5K384E-F            | 3.84   |
| 30-7.5      | S         | SFS44T30-7.5K384E-F          | 3.84   |
| 30-10       | S         | SFS44T30-10K384E-F           | 3.84   |
| 30-15       | S         | SFS44T30-15K475E-F           | 4.75   |
| 30-20       | S         | SFS44T30-20K475E-F           | 4.75   |
| 35-5        | S         | SFS44T35-5K384E-F            | 3.84   |
| 35-7.5      | T         | SFT44T35-7.5K291E-F          | 2.91   |
| 35-10       | T         | SFT44T35-10K291E-F           | 2.91   |
| 35-15       | T         | SFT44T35-15K291E-F           | 2.91   |
| 35-20       | T         | SFT44T35-20K391E-F           | 3.91   |
| 40-5        | T         | SFT44T40-5K291E-F            | 2.91   |
| 40-7.5      | T         | SFT44T40-7.5K291E-F          | 2.91   |
| 40-10       | T         | SFT44T40-10K291E-F           | 2.91   |
| 40-15       | T         | SFT44T40-15K391E-F           | 3.91   |
| 45-5        | T         | SFT44T45-5K291E-F            | 2.91   |
| 45-7.5      | T         | SFT44T45-7.5K291E-F          | 2.91   |
| 45-10       | T         | SFT44T45-10K391E-F           | 3.91   |
| 45-15       | T         | SFT44T45-15K391E-F           | 3.91   |
| 50-5        | T         | SFT44T50-5K391E-F            | 3.91   |
| 50-7.5      | T         | SFT44T50-7.5K391E-F          | 3.91   |
| 50-10       | T         | SFT44T50-10K391E-F           | 3.91   |
| 60-5        | T         | SFT44T60-5K391E-F            | 3.91   |
| 60-7.5      | T         | SFT44T60-7.5K391E-F          | 3.91   |
| 60-10       | T         | SFT44T60-10K391E-F           | 3.91   |

# Type SF Dual, Round & Oval, Oil-Filled Motor Run Capacitors

## Type SF Dual Oval

| Case Code | Dimensions (Inches) |      |                   |
|-----------|---------------------|------|-------------------|
|           | A                   | B    | H                 |
| C         | 1.91                | 2.91 | See Ratings Table |
| D         | 1.97                | 3.66 | See Ratings Table |



## Ratings

| Cap<br>( $\mu$ F- $\mu$ F) | Case<br>Code | Aluminum Catalog<br>Part Number | H<br>(in) |
|----------------------------|--------------|---------------------------------|-----------|
| <b>370V</b>                |              |                                 |           |
| 15-5                       | C            | SFC37T15-5K291E-F               | 2.91      |
| 15-10                      | C            | SFC37T15-10K291E-F              | 2.91      |
| 20-5                       | C            | SFC37T20-5K291E-F               | 2.91      |
| 20-7.5                     | C            | SFC37T20-7.5K291E-F             | 2.91      |
| 20-10                      | C            | SFC37T20-10K291E-F              | 2.91      |
| 25-5                       | C            | SFC37T25-5K291E-F               | 2.91      |
| 25-7.5                     | C            | SFC37T25-7.5K291E-F             | 2.91      |
| 25-10                      | C            | SFC37T25-10K291E-F              | 2.91      |
| 25-15                      | C            | SFC37T25-15K391E-F              | 3.91      |
| 30-5                       | C            | SFC37T30-5K391E-F               | 3.91      |
| 30-7.5                     | C            | SFC37T30-7.5K391E-F             | 3.91      |
| 30-10                      | C            | SFC37T30-10K391E-F              | 3.91      |
| 30-15                      | C            | SFC37T30-15K391E-F              | 3.91      |
| 30-20                      | C            | SFC37T30-20K391E-F              | 3.91      |
| 35-5                       | C            | SFC37T35-5K391E-F               | 3.91      |
| 35-7.5                     | C            | SFC37T35-7.5K391E-F             | 3.91      |
| 35-10                      | C            | SFC37T35-10K391E-F              | 3.91      |
| 35-15                      | C            | SFC37T35-15K391E-F              | 3.91      |
| 35-20                      | C            | SFC37T35-20K391E-F              | 3.91      |
| 40-5                       | C            | SFC37T40-5K391E-F               | 3.91      |
| 40-7.5                     | C            | SFC37T40-7.5K391E-F             | 3.91      |
| 40-10                      | C            | SFC37T40-10K391E-F              | 3.91      |
| 40-15                      | D            | SFD37T40-15K391E-F              | 3.91      |
| 45-5                       | D            | SFD37T45-5K391E-F               | 3.91      |
| 45-7.5                     | D            | SFD37T45-7.5K391E-F             | 3.91      |
| 45-10                      | D            | SFD37T45-10K391E-F              | 3.91      |
| 45-15                      | D            | SFD37T45-15K391E-F              | 3.91      |
| 50-5                       | D            | SFD37T50-5K391E-F               | 3.91      |
| 50-7.5                     | D            | SFD37T50-7.5K391E-F             | 3.91      |
| 50-10                      | D            | SFD37T50-10K391E-F              | 3.91      |
| 60-5                       | D            | SFD37T60-5K475E-F               | 4.75      |
| 60-7.5                     | D            | SFD37T60-7.5K475E-F             | 4.75      |
| 60-10                      | D            | SFD37T60-10K475E-F              | 4.75      |
| 70-5                       | D            | SFD37T70-5K475E-F               | 4.75      |
| 70-7.5                     | D            | SFD37T70-7.5K475E-F             | 4.75      |
| 70-10                      | D            | SFD37T70-10K475E-F              | 4.75      |
| 80-5                       | D            | SFD37T80-5K475E-F               | 4.75      |
| 80-7.5                     | D            | SFD37T80-7.5K475E-F             | 4.75      |
| 80-10                      | D            | SFD37T80-10K475E-F              | 4.75      |

| Cap<br>( $\mu$ F- $\mu$ F) | Case<br>Code | Aluminum Catalog<br>Part Number | H<br>(in) |
|----------------------------|--------------|---------------------------------|-----------|
| <b>440V</b>                |              |                                 |           |
| 15-5                       | C            | SFC44T15-5K291E-F               | 2.91      |
| 15-10                      | C            | SFC44T15-10K291E-F              | 2.91      |
| 20-5                       | C            | SFC44T20-5K291E-F               | 2.91      |
| 20-7.5                     | C            | SFC44T20-7.5K291E-F             | 2.91      |
| 20-10                      | C            | SFC44T20-10K291E-F              | 2.91      |
| 25-5                       | C            | SFC44T25-5K391E-F               | 3.91      |
| 25-7.5                     | C            | SFC44T25-7.5K391E-F             | 3.91      |
| 25-10                      | C            | SFC44T25-10K391E-F              | 3.91      |
| 25-15                      | C            | SFC44T25-15K391E-F              | 3.91      |
| 30-5                       | C            | SFC44T30-5K391E-F               | 3.91      |
| 30-7.5                     | C            | SFC44T30-7.5K391E-F             | 3.91      |
| 30-10                      | C            | SFC44T30-10K391E-F              | 3.91      |
| 30-15                      | C            | SFC44T30-15K391E-F              | 3.91      |
| 30-20                      | C            | SFC44T30-20K391E-F              | 3.91      |
| 35-5                       | C            | SFC44T35-5K475E-F               | 4.75      |
| 35-7.5                     | C            | SFC44T35-7.5K475E-F             | 4.75      |
| 35-10                      | C            | SFC44T35-10K475E-F              | 4.75      |
| 35-15                      | C            | SFC44T35-15K475E-F              | 4.75      |
| 35-20                      | C            | SFC44T35-20K475E-F              | 4.75      |
| 40-5                       | D            | SFD44T40-5K475E-F               | 4.75      |
| 40-7.5                     | D            | SFD44T40-7.5K475E-F             | 4.75      |
| 40-10                      | D            | SFD44T40-10K475E-F              | 4.75      |
| 40-15                      | D            | SFD44T40-15K475E-F              | 4.75      |
| 45-5                       | D            | SFD44T45-5K475E-F               | 4.75      |
| 45-7.5                     | D            | SFD44T45-7.5K475E-F             | 4.75      |
| 45-10                      | D            | SFD44T45-10K475E-F              | 4.75      |
| 45-15                      | D            | SFD44T45-15K475E-F              | 4.75      |
| 50-5                       | D            | SFD44T50-5K475E-F               | 4.75      |
| 50-7.5                     | D            | SFD44T50-7.5K475E-F             | 4.75      |
| 50-10                      | D            | SFD44T50-10K475E-F              | 4.75      |
| 60-5                       | D            | SFD44T60-5K616E-F               | 6.16      |
| 60-7.5                     | D            | SFD44T60-7.5K616E-F             | 6.16      |
| 60-10                      | D            | SFD44T60-10K616E-F              | 6.16      |

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## Type SF Dual, Round & Oval, Oil-Filled Motor Run Capacitors

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Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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