



## APPLICATIONS

DC voltage filtering for:

- DC link
- Resonant filtering
- Active correction (FACTS, UPFC, DVR...)
- Speed converters (drives and traction)
- Windmills
- Substation

## PACKAGING

Rectangular stainless steel case sandblasted. Grounding is via a threaded screw located on the cover of the case.

## ELECTRICAL CHARACTERISTICS – STANDARD PRODUCTS

|  |   |
|--|---|
| Capacitance range $C_n$  | 610 $\mu$ F to 15600 $\mu$ F                              |
| Tolerance on $C_n$   | $\pm 10\%$  |
| DC voltage range   | 1200V to 5000V  |
| Maximum hot-spot temperature                                   | 85°C  |
| Life duration at nominal voltage and 70°C hot-spot temperature | 100000 hours  |
| Stray inductance   | <400nH  |
| Test voltage between terminals                                 | 1.5 $V_n$ during 10s                                      |
| Test voltage between short terminals and case                  | 10kV <sub>rms</sub> (at 50Hz during 1mn)                  |
| Standard reference   | Conforms with IEC 61071 and 61881, 61373, 60068 and 60077 |

## ELECTRICAL CHARACTERISTICS – CUSTOM PRODUCTS

|  |   |
|--|---|
| Capacitance range $C_n$  | 83 $\mu$ F to 15300 $\mu$ F                                       |
| Tolerance on $C_n$ ( $\pm 5\%$ or $\pm 2\%$ available for specific requirements) | $\pm 10\%$  |
| DC voltage range   | 1200V to 6000V  |
| Maximum hot-spot temperature   | 85°C  |
| Life duration at nominal voltage and 70°C hot-spot temperature                   | 100,000 hours   |
| Stray inductance   | 200nH to 430nH  |
| On option low inductance for IGBT and other applications                         | down to 40nH  |
| Test voltage between terminals   | 1.5 $V_n$ during 10s  |
| Test voltage between short terminals and case                                    | 10kV <sub>rms</sub> (at 50Hz during 1mn)                          |
| Standard reference   | Conforms with IEC 61071, 61881 and 61373, IEC 60068 and IEC 60077 |

# Medium Power Film Capacitors

## FFLC Design

### DC FILTERING



### APPLICATIONS

The FFLC is specifically designed for DC filtering, low reactive power.

### PACKAGING

Rectangular resin filled aluminum case.

FFLC capacitors meet the level 2 requirement of the fire behavior standard NF F 16 102.

### PRESENTATION

Non-painted rectangular resin filled aluminium case

4 x M10 terminals\*

**NEW** Available with M10 X 12 female terminal upon request (last codification digit "--" become in that case "JE")

### ELECTRICAL CHARACTERISTICS

|                                    |  |
|------------------------------------|--|
| Capacitance range $C_n$            | 1120 $\mu$ F to 8800 $\mu$ F (other values available upon request) |
| Tolerance on $C_n$                 | $\pm 10\%$   |
| Rated DC voltage $V_{ndc}$         | 680 to 1200 V  |
| Maximum rms current $I_{rms\ max}$ | 140 Arms to 300 Arms   |
| Stray inductance $L_s^*$           | 28 nH to 40 nH   |

### FFLC

| Part Number                         | Capacitance ( $\mu$ F) | Height mm (in) | Width mm (in) | $I_{rms}$ (A) | $L_s^*$ (nH) | $R_s$ (m $\Omega$ ) | $R_{th}$ ( $^{\circ}$ C/W) | Weight (kg) |
|-------------------------------------|------------------------|----------------|---------------|---------------|--------------|---------------------|----------------------------|-------------|
| <b><math>U_N</math> dc: 680 V</b>   |                        |                |               |               |              |                     |                            |             |
| FFLC6A8807K--                       | 8800                   | 240 (9.449)    | 170 (6.693)   | 220           | 40           | 0.58                | 1.2                        | 18          |
| FFLC6A7157K--                       | 7150                   | 240 (9.449)    | 145 (5.709)   | 230           | 38           | 0.50                | 1.2                        | 13.2        |
| FFLC6A6507K--                       | 6500                   | 240 (9.449)    | 145 (5.709)   | 210           | 38           | 0.55                | 1.3                        | 15.5        |
| FFLC6A5607K--                       | 5600                   | 170 (6.693)    | 170 (6.693)   | 140           | 35           | 0.88                | 1.8                        | 15.5        |
| FFLC6A4557K--                       | 4550                   | 170 (6.693)    | 145 (5.709)   | 150           | 30           | 0.77                | 1.8                        | 11.3        |
| FFLC6A4187K--                       | 4180                   | 240 (9.449)    | 95 (3.740)    | 300           | 35           | 0.34                | 1.0                        | 10.3        |
| FFLC6A2667K--                       | 2660                   | 170 (6.693)    | 95 (3.740)    | 170           | 28           | 0.49                | 1.6                        | 7.3         |
| <b><math>U_N</math> dc: 1000 V</b>  |                        |                |               |               |              |                     |                            |             |
| FFLC6L5067K--                       | 5060                   | 240 (9.449)    | 170 (6.693)   | 250           | 40           | 0.61                | 1.2                        | 17.2        |
| FFLC6L3207K--                       | 3200                   | 170 (6.693)    | 170 (6.693)   | 150           | 35           | 0.89                | 1.9                        | 12.4        |
| FFLC6L4307K--                       | 4300                   | 240 (9.449)    | 145 (5.709)   | 300           | 38           | 0.52                | 1.1                        | 15.5        |
| FFLC6L2737K--                       | 2730                   | 170 (6.693)    | 145 (5.709)   | 170           | 30           | 0.75                | 1.6                        | 11.3        |
| FFLC6L2537K--                       | 2530                   | 240 (9.449)    | 95 (3.740)    | 300           | 35           | 0.36                | 0.8                        | 10.3        |
| FFLC6L1607K--                       | 1600                   | 170 (6.693)    | 95 (3.740)    | 170           | 28           | 0.51                | 1.2                        | 7.3         |
| <b><math>U_N</math> dc : 1200 V</b> |                        |                |               |               |              |                     |                            |             |
| FFLC6U3527K--                       | 3520                   | 240 (9.449)    | 170 (6.693)   | 250           | 40           | 0.71                | 1.2                        | 18.8        |
| FFLC6U2247K--                       | 2240                   | 170 (6.693)    | 170 (6.693)   | 150           | 35           | 1.1                 | 1.9                        | 12.7        |
| FFLC6U3007K--                       | 3000                   | 240 (9.449)    | 145 (5.709)   | 300           | 38           | 0.60                | 1.1                        | 15.5        |
| FFLC6U1907K--                       | 1900                   | 170 (6.693)    | 145 (5.709)   | 170           | 30           | 0.87                | 1.6                        | 11.3        |
| FFLC6U1757K--                       | 1750                   | 240 (9.449)    | 95 (3.740)    | 300           | 35           | 0.41                | 0.8                        | 10.3        |
| FFLC6U1127K--                       | 1120                   | 170 (6.693)    | 95 (3.740)    | 170           | 28           | 0.59                | 1.2                        | 7.3         |

\*Very low stray inductance for high frequency applications on request.

# Medium Power Film Capacitors

## FFVE/FFVI Male and Female Connections



The FFV capacitor is specifically designed for DC filtering, low reactive power.

The series uses a non-impregnated metallized polypropylene or polyester dielectric, which features a controlled self-healing process, specially treated to have a very high dielectric strength in operating conditions up to 105°C.

The FFV special design gives this series a very low level of stray inductance (18 nH to 40 nH).

Furthermore, the performance levels of the FFVE capacitor makes them a very interesting alternative to electrolytic technology, because they can withstand much higher levels of surge voltage, very high rms current ratings, and longer lifetimes.

### PACKAGING

Self-extinguishing plastic case (V0 = in accordance with UL 94) filled thermosetting resin.

Self-extinguishing thermosetting resin (V0 = in accordance with UL 94; I3F1 = in accordance with NF F 16-101).

FFVE capacitors meet the Level 2 requirement of the fire behavior standard NF F 16-102.

### POLYESTER DIELECTRIC

Dimensions: millimeters (inches)

| Capacitance (µF)                 | Height     | Irms max. (A) | Ls max. (nH) | Rs (mΩ) | Rth (°C/W) | Part Number*  |
|----------------------------------|------------|---------------|--------------|---------|------------|---------------|
| <b>V<sub>ndc</sub> 300 volts</b> |            |               |              |         |            |               |
| 180                              | 34 (1.339) | 100           | 18           | 0.8     | 4.7        | FFVE4H0187K-- |
| 195                              | 34 (1.339) | 100           | 18           | 0.8     | 4.4        | FFVE4H1956K-- |
| 250                              | 40 (1.575) | 100           | 25           | 0.6     | 5.2        | FFVE4H0257K-- |
| 350                              | 51 (2.008) | 100           | 32           | 0.8     | 7.2        | FFVE4H0357K-- |
| 400                              | 51 (2.008) | 110           | 32           | 0.8     | 7.1        | FFVE4H0407K-- |
| <b>V<sub>ndc</sub> 400 volts</b> |            |               |              |         |            |               |
| 100                              | 34 (1.339) | 80            | 18           | 0.7     | 4.7        | FFVE4I0107K-- |
| 120                              | 34 (1.339) | 100           | 18           | 0.6     | 4.1        | FFVE4I0127K-- |
| 150                              | 40 (1.575) | 100           | 25           | 0.7     | 5.0        | FFVE4I0157K-- |
| 180                              | 51 (2.008) | 80            | 32           | 1.0     | 8.5        | FFVE4I0187K-- |
| 220                              | 51 (2.008) | 100           | 32           | 0.9     | 7.2        | FFVE4I0227K-- |

\*Change "K--" to "KJE" for female connectors M5 x 7.5mm

# Medium Power Film Capacitors

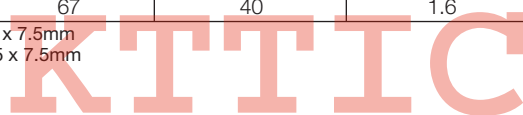
## FFVE/FFVI Male and Female Connections

### POLYPROPYLENE DIELECTRIC

| Capacitance (μF)                  | Height     | Irms max. (A) | Ls max. (nH) | Rs (mΩ) | Rth (°C/W) | Part Number*  |
|-----------------------------------|------------|---------------|--------------|---------|------------|---------------|
| <b>V<sub>ndc</sub> 600 volts</b>  |            |               |              |         |            |               |
| 25                                | 34 (1.339) | 90            | 18           | 0.7     | 4.3        | FFVE6K0256K-- |
| 100                               | 40 (1.575) | 100           | 25           | 0.6     | 4.8        | FFVE6K0107K-- |
| 150                               | 51 (2.008) | 110           | 32           | 0.9     | 6.9        | FFVE6K0157K-- |
| 220                               | 64 (2.520) | 100           | 40           | 1.0     | 8.4        | FFVE6K0227K-- |
| <b>V<sub>ndc</sub> 800 volts</b>  |            |               |              |         |            |               |
| 66                                | 40 (1.575) | 100           | 25           | 0.7     | 4.7        | FFVE6B0666K-- |
| 100                               | 51 (2.008) | 90            | 32           | 1.0     | 6.7        | FFVE6B0107K-- |
| 140                               | 64 (2.520) | 100           | 40           | 1.3     | 8.4        | FFVE6B0147K-- |
| <b>V<sub>ndc</sub> 900 volts</b>  |            |               |              |         |            |               |
| 12                                | 34 (1.339) | 70            | 18           | 0.9     | 4.4        | FFVE6C0126K-- |
| 38                                | 34 (1.339) | 100           | 18           | 1.6     | 3.9        | FFVE6C0386K-- |
| 47                                | 40 (1.575) | 100           | 25           | 0.8     | 4.6        | FFVE6C0476K-- |
| 70                                | 51 (2.008) | 100           | 32           | 1.2     | 6.7        | FFVE6C0706K-- |
| 100                               | 64 (2.520) | 90            | 40           | 1.1     | 8.2        | FFVE6C0107K-- |
| <b>V<sub>ndc</sub> 1000 volts</b> |            |               |              |         |            |               |
| 66                                | 40 (1.575) | 70            | 25           | 1.5     | 5.1        | FFVE6L0666KJ7 |
| 100                               | 51 (2.008) | 64            | 32           | 2.0     | 7.3        | FFVE6L0107KJ7 |
| 140                               | 64 (2.520) | 51            | 40           | 2.5     | 9.2        | FFVE6L0147KJ7 |
| <b>V<sub>ndc</sub> 1200 volts</b> |            |               |              |         |            |               |
| 47                                | 40 (1.575) | 66            | 25           | 1.7     | 4.9        | FFVE6U0476KJ7 |
| 70                                | 51 (2.008) | 59            | 32           | 2.4     | 7.2        | FFVE6U0706KJ7 |
| 100                               | 64 (2.520) | 49            | 40           | 2.9     | 8.9        | FFVE6U0107KJ7 |
| <b>V<sub>ndc</sub> 1900 volts</b> |            |               |              |         |            |               |
| 15                                | 40 (1.575) | 73            | 25           | 1.1     | 5.2        | FFVE6N0156KJ7 |
| 24                                | 51 (2.008) | 73            | 32           | 1.3     | 6.5        | FFVE6N0246KJ7 |
| 35                                | 64 (2.520) | 67            | 40           | 1.6     | 8.4        | FFVE6N0356KJ7 |

\*Change "K--" to "KJE" for female connectors M5 x 7.5mm

\*Change "KJ7" to "K7X" for female connectors M5 x 7.5mm



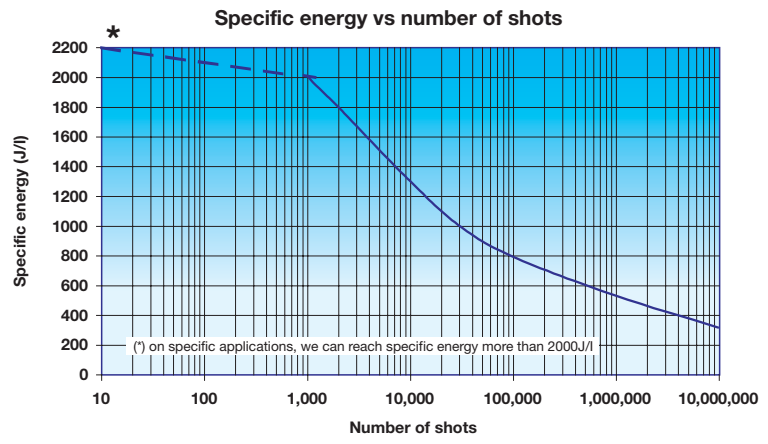
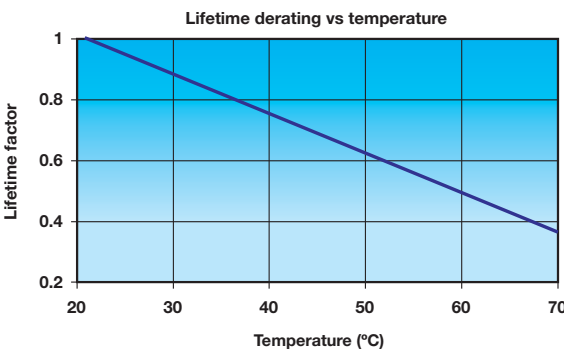
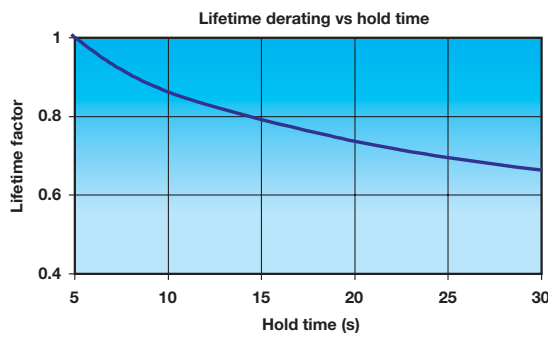
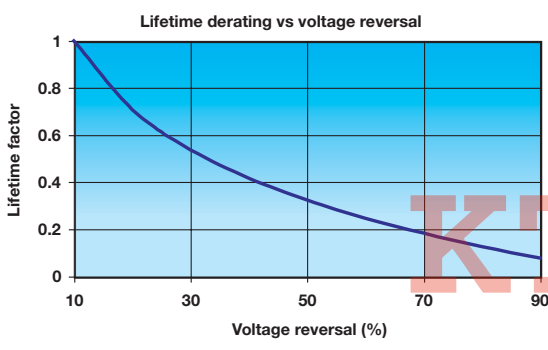
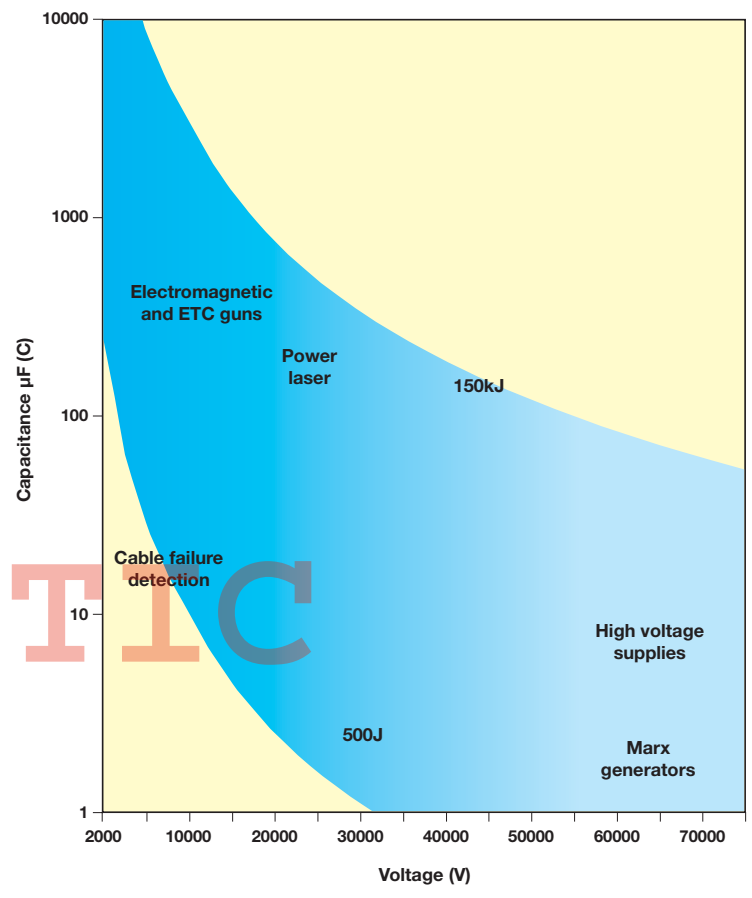
### POLYPROPYLENE DIELECTRIC

| Capacitance (μF)                  | Height     | Irms max. (A) | Ls max. (nH) | Rs (mΩ) | Rth (°C/W) | Part Number*  |
|-----------------------------------|------------|---------------|--------------|---------|------------|---------------|
| <b>V<sub>ndc</sub> 500 volts</b>  |            |               |              |         |            |               |
| 125                               | 40 (1.575) | 90            | 25           | 0.6     | 5.0        | FFVI6J1256K-- |
| 200                               | 51 (2.008) | 90            | 32           | 0.8     | 6.7        | FFVI6J0207K-- |
| 275                               | 64 (2.520) | 90            | 40           | 0.9     | 8.7        | FFVI6J2756K-- |
| <b>V<sub>ndc</sub> 700 volts</b>  |            |               |              |         |            |               |
| 100                               | 40 (1.575) | 100           | 25           | 0.6     | 4.8        | FFVI6A0107K-- |
| 150                               | 51 (2.008) | 100           | 32           | 0.9     | 6.9        | FFVI6A0157K-- |
| 220                               | 64 (2.520) | 100           | 40           | 1.0     | 8.4        | FFVI6A0227K-- |
| <b>V<sub>ndc</sub> 900 volts</b>  |            |               |              |         |            |               |
| 66                                | 40 (1.575) | 100           | 25           | 0.7     | 4.7        | FFVI6C0666K-- |
| 100                               | 51 (2.008) | 90            | 32           | 1.0     | 6.7        | FFVI6C0107K-- |
| 140                               | 64 (2.520) | 100           | 40           | 1.3     | 8.4        | FFVI6C0147K-- |
| <b>V<sub>ndc</sub> 1100 volts</b> |            |               |              |         |            |               |
| 47                                | 40 (1.575) | 100           | 25           | 0.8     | 4.6        | FFVI6L0476K-- |
| 70                                | 51 (2.008) | 100           | 32           | 1.2     | 6.7        | FFVI6L0706K-- |
| 100                               | 64 (2.520) | 90            | 40           | 1.1     | 8.2        | FFVI6L0107K-- |

\*Change "K--" to "KJE" for female connectors M5 x 7.5mm



Controlled self-healing film capacitor technology, is ideal for discharge applications. DISFIM capacitors range from 2kV to 75kV and the maximum energy per can is 150kJ. Each capacitor is divided into several million elementary capacitances. The weak points in the dielectric are insulated and the capacitor continues to work without a short circuit or risk of explosion. They are designed to lose less than 5% of their capacitance during their lifetime.



# Medium Power Film Capacitors FPX



## APPLICATIONS

Protection of thyristors.  
Protection of gate turn-off thyristor (G.T.O.).  
Clamping (Secondary snubber).

## TECHNOLOGY

Metallized polypropylene dielectric capacitor with controlled self-healing.  
Reinforced metallization developed for high impulse currents.  
Axial connections specially developed to reduce series inductance and to provide rigid mechanical mounting.

## PACKAGING

Cylindrical in plastic case filled with thermosetting resin.  
Outputs: threaded inserts either M6 or M8.

## PROTECTION

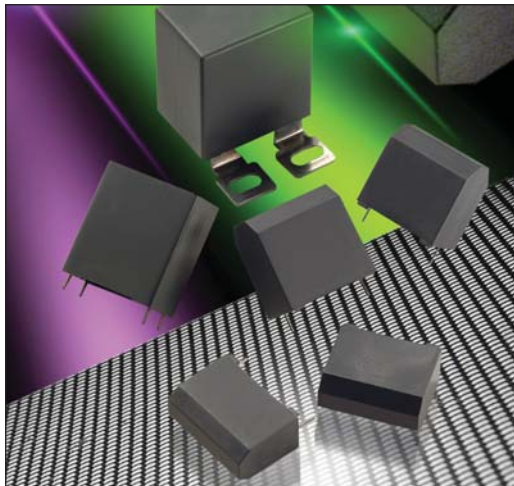
Dimensions: millimeters (inches)

| Cn<br>(μF)        | Case<br>Type       | Dimensions                      |                     |                                  |            | I <sup>2</sup> t<br>max.<br>(A <sup>2</sup> .s) | I <sub>rms</sub><br>max.<br>(A) | Rs<br>(mΩ)                    | Rth<br>(°C/W) | Part Number   |
|-------------------|--------------------|---------------------------------|---------------------|----------------------------------|------------|---|---------------------------------|-------------------------------|---------------|---------------|
|                   |                    | H*<br>±0.5<br>(±0.020)          | h<br>±2<br>(±0.079) | D<br>max.                        | d<br>±0.1  |   |                                 |                               |               |               |
| <b>FPX 2000 V</b> |                    | <b>V<sub>ndc</sub> = 1000 V</b> |                     | <b>V<sub>peak</sub> = 1600 V</b> |            | <b>V<sub>rms</sub> = 560 V</b>                  |                                 | <b>V<sub>s</sub> = 2000 V</b> |               |               |
| 1                 | Plastic case M6/6  | 52 (2.072)                      | 5 (0.197)           | 40 (1.575)                       | 18 (0.709) | 2   | 15                              | 2.4                           | 14            | FPX66N0105J-- |
| 2                 | Plastic case M8/8  | 52 (2.072)                      | 5 (0.197)           | 60 (2.362)                       | 22 (0.866) | 8   | 30                              | 1.2                           | 6.1           | FPX86N0205J-- |
| 3                 | Plastic case M8/8  | 52 (2.072)                      | 5 (0.197)           | 72 (2.835)                       | 22 (0.866) | 18  | 45                              | 0.9                           | 4.5           | FPX86N0305J-- |
| 3.5               | Plastic case M8/8  | 52 (2.072)                      | 5 (0.197)           | 72 (2.835)                       | 22 (0.866) | 25  | 50                              | 0.85                          | 4.5           | FPX86N0355J-- |
| 4                 | Plastic case M8/8  | 52 (2.072)                      | 5 (0.197)           | 82 (3.228)                       | 22 (0.866) | 32  | 60                              | 0.75                          | 3.5           | FPX86N0405J-- |
| 5                 | Plastic case M8/8  | 52 (2.072)                      | 5 (0.197)           | 82 (3.228)                       | 22 (0.866) | 50  | 70                              | 0.65                          | 2.5           | FPX86N0505J-- |
| <b>FPX 2500 V</b> |                    | <b>V<sub>ndc</sub> = 1300 V</b> |                     | <b>V<sub>peak</sub> = 2000 V</b> |            | <b>V<sub>rms</sub> = 700 V</b>                  |                                 | <b>V<sub>s</sub> = 2500 V</b> |               |               |
| 0.5               | Plastic case M6/6  | 52 (2.072)                      | 5 (0.197)           | 40 (1.575)                       | 18 (0.709) | 1   | 15                              | 3                             | 14            | FPX66P0504J-- |
| 1                 | Plastic case M8/8  | 52 (2.072)                      | 5 (0.197)           | 60 (2.362)                       | 22 (0.866) | 3   | 20                              | 2.3                           | 10.5          | FPX86P0105J-- |
| 1.5               | Plastic case M8/8  | 52 (2.072)                      | 5 (0.197)           | 60 (2.362)                       | 22 (0.866) | 7   | 30                              | 1.5                           | 6.1           | FPX86P0155J-- |
| 2                 | Plastic case M8/8  | 52 (2.072)                      | 5 (0.197)           | 72 (2.835)                       | 22 (0.866) | 12.7  | 40                              | 1.1                           | 4.5           | FPX86P0205J-- |
| 2.5               | Plastic case M8/8  | 52 (2.072)                      | 5 (0.197)           | 72 (2.835)                       | 22 (0.866) | 20  | 60                              | 0.89                          | 3.7           | FPX86P0255J-- |
| 3                 | Plastic case M8/8  | 52 (2.072)                      | 5 (0.197)           | 82 (3.228)                       | 22 (0.866) | 28  | 60                              | 0.85                          | 3.2           | FPX86P0305J-- |
| 3.5               | Plastic case M8/8  | 52 (2.072)                      | 5 (0.197)           | 82 (3.228)                       | 22 (0.866) | 39  | 65                              | 0.78                          | 2.9           | FPX86P0355J-- |
| <b>FPX 3500 V</b> |                    | <b>V<sub>ndc</sub> = 2000 V</b> |                     | <b>V<sub>peak</sub> = 2400 V</b> |            | <b>V<sub>rms</sub> = 850 V</b>                  |                                 | <b>V<sub>s</sub> = 3500 V</b> |               |               |
| 2                 | Plastic case M8/8  | 62 (2.441)                      | 5 (0.197)           | 72 (2.835)                       | 22 (0.866) | 23  | 41                              | 1.24                          | 6.1           | FPX86X0205J-  |
| 3                 | Plastic case M8/8  | 62 (2.441)                      | 5 (0.197)           | 92 (3.622)                       | 22 (0.866) | 50  | 62                              | 0.92                          | 3.9           | FPX86X0305J-- |
| 3.5               | Plastic case M8/8  | 62 (2.441)                      | 5 (0.197)           | 92 (3.622)                       | 22 (0.866) | 70  | 72                              | 0.83                          | 3.4           | FPX86X0355J-- |
| 4                 | Plastic case M8/8  | 62 (2.441)                      | 5 (0.197)           | 92 (3.622)                       | 22 (0.866) | 85  | 80                              | 0.78                          | 3.1           | FPX86X0405J-- |
| <b>FPX 4500 V</b> |                    | <b>V<sub>ndc</sub> = 2500 V</b> |                     | <b>V<sub>peak</sub> = 3200 V</b> |            | <b>V<sub>rms</sub> = 1130 V</b>                 |                                 | <b>V<sub>s</sub> = 4500 V</b> |               |               |
| 0.9               | Plastic case M8/8  | 62 (2.441)                      | 5 (0.197)           | 72 (2.835)                       | 22 (0.866) | 15  | 40                              | 1.5                           | 6.2           | FPX86Z0904J-- |
| 1                 | Plastic case M8/8  | 62 (2.441)                      | 5 (0.197)           | 72 (2.835)                       | 22 (0.866) | 15  | 38                              | 1.4                           | 6.2           | FPX86Z0105J-- |
| 2                 | Plastic case M8/8  | 62 (2.441)                      | 5 (0.197)           | 92 (3.622)                       | 22 (0.866) | 70  | 75                              | 0.85                          | 3.1           | FPX86Z0205J-- |
| <b>FPX 4600 V</b> |                    | <b>V<sub>ndc</sub> = 3000 V</b> |                     | <b>V<sub>peak</sub> = 4000 V</b> |            | <b>V<sub>rms</sub> = 1400 V</b>                 |                                 | <b>V<sub>s</sub> = 4600 V</b> |               |               |
| 0.5               | Plastic case M8/8  | 62 (2.441)                      | 5 (0.197)           | 72 (2.835)                       | 22 (0.866) | 7   | 40                              | 1.7                           | 12            | FPX86Y0504J-- |
| 0.68              | Plastic case M8/8  | 62 (2.441)                      | 5 (0.197)           | 72 (2.835)                       | 22 (0.866) | 14  | 35                              | 1.59                          | 6.2           | FPX86Y0684J-- |
| 1.25              | Plastic case M8/8  | 62 (2.441)                      | 5 (0.197)           | 92 (3.622)                       | 22 (0.866) | 50  | 65                              | 1                             | 3.3           | FPX86Y1254J-- |
| 1.5               | Plastic case M8/10 | 79 (3.110)                      | 6 (0.236)           | 98 (3.858)                       | -          | 32  | 60                              | 1.4                           | 8.3           | FPX86Y0155J-- |
| 1.7               | Plastic case M8/10 | 79 (3.110)                      | 6 (0.236)           | 98 (3.858)                       | -          | 40  | 70                              | 1.3                           | 7.4           | FPX86Y0175J-- |
| 2                 | Plastic case M8/10 | 79 (3.110)                      | 6 (0.236)           | 98 (3.858)                       | -          | 56  | 80                              | 1.1                           | 6.3           | FPX86Y0205J-- |
| 2.5               | Plastic case M8/10 | 118 (4.646)                     | 6 (0.236)           | 98 (3.858)                       | -          | 200   | 130                             | 0.8                           | 1.1           | FPX86Y0255J-- |
| 2.7               | Plastic case M8/10 | 118 (4.646)                     | 6 (0.236)           | 98 (3.858)                       | -          | 232   | 140                             | 0.7                           | 1.1           | FPX86Y0275J-- |
| 3                 | Plastic case M8/10 | 143 (5.630)                     | 6 (0.236)           | 98 (3.858)                       | -          | 128   | 100                             | 0.9                           | 1.5           | FPX86Y0305J-- |
| 3.5               | Plastic case M8/10 | 143 (5.630)                     | 6 (0.236)           | 98 (3.858)                       | -          | 170   | 110                             | 0.8                           | 1.4           | FPX86Y0355J-- |
| 4                 | Plastic case M8/10 | 143 (5.630)                     | 6 (0.236)           | 98 (3.858)                       | -          | 224   | 115                             | 0.8                           | 1.4           | FPX86Y0405J-- |
| 4.5               | Plastic case M8/10 | 163 (6.417)                     | 6 (0.236)           | 98 (3.858)                       | -          | 522   | 120                             | 0.6                           | 1.7           | FPX86Y0455J-- |
| 5                 | Plastic case M8/10 | 163 (6.417)                     | 6 (0.236)           | 98 (3.858)                       | -          | 600   | 130                             | 0.6                           | 1.7           | FPX86Y0505J-- |
| 6                 | Plastic case M8/10 | 163 (6.417)                     | 6 (0.236)           | 98 (3.858)                       | -          | 729   | 160                             | 0.5                           | 1.7           | FPX86Y0605J-- |

\* Tol: +0 / -3mm for H ≥ 118mm

# Medium Power Film Capacitors

## FSB



Metallized polypropylene dielectric capacitor with controlled self-healing.  
Reinforced metallization developed for high impulse currents.

### APPLICATIONS

- IGBT protection
- IGBT clamping

### PACKAGING

- Parallelepipedic plastic case with thermosetting resin

| References                     | Capacitance (μF) | Box Kind                        | (I <sup>2</sup> t) (A <sup>2</sup> s) | I <sub>rms</sub> (A)          | R <sub>s</sub> (mΩ) | R <sub>th</sub> (hotspot/amb.) |
|--------------------------------|------------------|---------------------------------|---------------------------------------|-------------------------------|---------------------|--------------------------------|
| <b>U<sub>Ndc</sub> = 1200V</b> |                  | <b>V<sub>peak</sub> = 1600V</b> |                                       | <b>V<sub>rms</sub> = 560V</b> |                     | <b>V<sub>s</sub> = 2000V</b>   |
| FSB16U0154J--                  | 0.15             | P0                              | 0.05                                  | 3                             | 14.3                | 45.9                           |
| FSB26U0274J--                  | 0.27             | 18                              | 0.15                                  | 7.6                           | 8.4                 | 36.8                           |
| FSB36U0394J--                  | 0.39             | 19                              | 0.31                                  | 11                            | 6.2                 | 32.2                           |
| FSB46U0474J--                  | 0.47             | 26                              | 0.41                                  | 12                            | 5.6                 | 29.4                           |
| FSB56U0684J--                  | 0.68             | R68 (2 terminals)               | 0.94                                  | 12                            | 3.8                 | 23.7                           |
| FSB56U0684JJC                  | 0.68             | R68 (4 terminals)               | 0.94                                  | 16.7                          | 3.8                 | 23.7                           |
| <b>U<sub>Ndc</sub> = 1600V</b> |                  | <b>V<sub>peak</sub> = 2000V</b> |                                       | <b>V<sub>rms</sub> = 630V</b> |                     | <b>V<sub>s</sub> = 2300V</b>   |
| FSB16M0134J--                  | 0.13             | P0                              | 0.05                                  | 4.6                           | 13.3                | 44.9                           |
| FSB26M0184J--                  | 0.18             | 18                              | 0.1                                   | 6.4                           | 9.9                 | 35.9                           |
| FSB36M0244J--                  | 0.24             | 19                              | 0.18                                  | 8.5                           | 7.8                 | 32.4                           |
| FSB46M0334J--                  | 0.33             | 26                              | 0.35                                  | 11.7                          | 5.6                 | 28.6                           |
| FSB56M0434J--                  | 0.43             | R68 (2 terminals)               | 0.59                                  | 12                            | 4.6                 | 23.8                           |
| FSB56M0434JJC                  | 0.43             | R68 (4 terminals)               | 0.59                                  | 15.2                          | 4.6                 | 23.8                           |
| <b>U<sub>Ndc</sub> = 2000V</b> |                  | <b>V<sub>peak</sub> = 2400V</b> |                                       | <b>V<sub>rms</sub> = 700V</b> |                     | <b>V<sub>s</sub> = 2600V</b>   |
| FSB16N0104J--                  | 0.1              | P0                              | 0.05                                  | 4.2                           | 14.3                | 44.6                           |
| FSB26N0134J--                  | 0.13             | 18                              | 0.08                                  | 5.5                           | 11.3                | 35.7                           |
| FSB36N0184J--                  | 0.18             | 19                              | 0.15                                  | 7.6                           | 8.5                 | 32.1                           |
| FSB46N0224J--                  | 0.22             | 26                              | 0.22                                  | 9.3                           | 6.8                 | 29.1                           |
| FSB56N0304J--                  | 0.3              | R68 (2 terminals)               | 0.41                                  | 12                            | 5.3                 | 23.8                           |
| FSB56N0304JJC                  | 0.3              | R68 (4 terminals)               | 0.41                                  | 12.7                          | 5.3                 | 23.8                           |

| Part Number      | Capacitance (μF) | (I <sup>2</sup> t) (A <sup>2</sup> s) | I <sub>rms max.</sub> (A) | R <sub>s</sub> (mΩ)          | R <sub>th</sub> (°C/W) |
|------------------|------------------|---------------------------------------|---------------------------|------------------------------|------------------------|
| <b>FSB 850V</b>  |                  | <b>V<sub>peak</sub> = 1200V</b>       |                           | <b>V<sub>s</sub> = 1500V</b> |                        |
| FSB66B0205K--    | 2                | 0.99                                  | 25                        | 3.4                          | 19.1                   |
| FSB66B0225K--    | 2.2              | 1.19                                  | 28                        | 3.1                          | 18.6                   |
| FSB66B0255K--    | 2.5              | 1.54                                  | 28                        | 2.7                          | 17.8                   |
| <b>FSB 1200V</b> |                  | <b>V<sub>peak</sub> = 1600V</b>       |                           | <b>V<sub>s</sub> = 2000V</b> |                        |
| FSB66U0105K--    | 1                | 1.47                                  | 25                        | 3.6                          | 17.2                   |
| FSB66U0125K--    | 1.2              | 1.69                                  | 26                        | 3.4                          | 17.5                   |
| FSB66U0155K--    | 1.5              | 1                                     | 26                        | 3.4                          | 17.5                   |
| <b>FSB 2000V</b> |                  | <b>V<sub>peak</sub> = 2400V</b>       |                           | <b>V<sub>s</sub> = 2600V</b> |                        |
| FSB66N0474K--    | 0.47             | 0.41                                  | 22                        | 6.3                          | 19.4                   |
| FSB66N0564K--    | 0.56             | 0.62                                  | 23                        | 5.2                          | 17.9                   |
| FSB66N0684K--    | 0.68             | 0.91                                  | 24                        | 4.4                          | 17.3                   |