

# F2D SERIES

Foil Winding Type : Standard

\*Thin coating makes it suitable for automatic insertion.

RoHS  
compliance



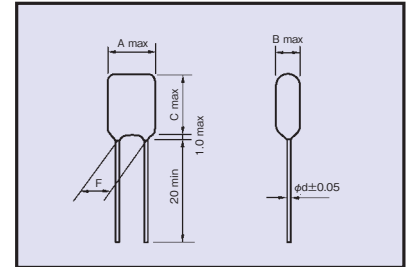
## SPECIFICATIONS

|                                 |                             |
|---------------------------------|-----------------------------|
| Category Temperature Range      | -40~+105°C ※                |
| Rated Voltage (U <sub>R</sub> ) | 50Vdc, 100Vdc, 200Vdc       |
| Capacitance Tolerance           | ±5%(J), ±10%(K)             |
| tanδ                            | 0.01max at 1kHz             |
| Voltage Proof                   | U <sub>R</sub> ×200% 60s    |
| Insulation Resistance           | 30000MΩmin                  |
| Reference Standard              | JIS C 5101-11, JIS C 5101-1 |

※Derate the voltage as shown in the "CAUTION FOR PROPER USE OF FILM CAPACITORS" when using the capacitor beyond 85°C.

## DIMENSIONS

(mm)



## PART NUMBER

Rated Voltage     
 F2D Series     
    Capacitance     
  Capacitance Tolerance     
    Option     
 T  Taping

## STANDARD SIZE

☐:Capacitance Tolerance    \*\*:Taping

| Rated Voltage | Cap(μF) | Dimensions (mm) |     |      |         |        |     | Typical Packaging Quantity (pcs) |        |                               |       |   |   |       | Part No.    |
|---------------|---------|-----------------|-----|------|---------|--------|-----|----------------------------------|--------|-------------------------------|-------|---|---|-------|-------------|
|               |         |                 |     |      |         |        |     | Long Lead type                   |        | Taping Ammo Pack Type - Style |       |   |   |       |             |
|               |         | A               | B   | C    | F       | LS±0.5 | d   | Bag                              | Carton | TV                            | TF    | — | — | TS    |             |
| 50 Vdc        | 0.00047 | 6.0             | 3.0 | 7.5  | 3.5±0.5 | 5.0    | 0.5 | 200                              | 10,000 | 3,000                         | —     | — | — | 3,000 | 50F2D471□** |
|               | 0.00056 | 6.0             | 3.0 | 7.5  | 3.5±0.5 | 5.0    | 0.5 | 200                              | 10,000 | 3,000                         | —     | — | — | 3,000 | 50F2D561□** |
|               | 0.00068 | 6.0             | 3.0 | 7.5  | 3.5±0.5 | 5.0    | 0.5 | 200                              | 10,000 | 3,000                         | —     | — | — | 3,000 | 50F2D681□** |
|               | 0.00082 | 6.0             | 3.0 | 7.5  | 3.5±0.5 | 5.0    | 0.5 | 200                              | 10,000 | 3,000                         | —     | — | — | 3,000 | 50F2D821□** |
|               | 0.001   | 6.0             | 3.0 | 7.5  | 3.5±0.5 | 5.0    | 0.5 | 200                              | 10,000 | 3,000                         | —     | — | — | 3,000 | 50F2D102□** |
|               | 0.0012  | 6.0             | 3.0 | 7.5  | 3.5±0.5 | 5.0    | 0.5 | 200                              | 10,000 | 3,000                         | —     | — | — | 3,000 | 50F2D122□** |
|               | 0.0015  | 6.0             | 3.0 | 7.5  | 3.5±0.5 | 5.0    | 0.5 | 200                              | 10,000 | 3,000                         | —     | — | — | 3,000 | 50F2D152□** |
|               | 0.0018  | 6.0             | 3.0 | 7.5  | 3.5±0.5 | 5.0    | 0.5 | 200                              | 10,000 | 3,000                         | —     | — | — | 3,000 | 50F2D182□** |
|               | 0.0022  | 6.0             | 3.0 | 7.5  | 3.5±0.5 | 5.0    | 0.5 | 200                              | 10,000 | 3,000                         | —     | — | — | 3,000 | 50F2D222□** |
|               | 0.0027  | 6.0             | 3.0 | 7.5  | 3.5±0.5 | 5.0    | 0.5 | 200                              | 10,000 | 3,000                         | —     | — | — | 3,000 | 50F2D272□** |
|               | 0.0033  | 6.0             | 3.0 | 7.5  | 3.5±0.5 | 5.0    | 0.5 | 200                              | 10,000 | 3,000                         | —     | — | — | 3,000 | 50F2D332□** |
|               | 0.0039  | 6.0             | 3.0 | 7.5  | 3.5±0.5 | 5.0    | 0.5 | 200                              | 10,000 | 3,000                         | —     | — | — | 3,000 | 50F2D392□** |
|               | 0.0047  | 6.0             | 3.5 | 7.5  | 3.5±0.5 | 5.0    | 0.5 | 200                              | 10,000 | 3,000                         | —     | — | — | 3,000 | 50F2D472□** |
|               | 0.0056  | 6.0             | 3.0 | 7.5  | 3.5±0.5 | 5.0    | 0.5 | 200                              | 10,000 | 3,000                         | —     | — | — | 3,000 | 50F2D562□** |
|               | 0.0068  | 6.0             | 3.0 | 7.5  | 3.5±0.5 | 5.0    | 0.5 | 200                              | 10,000 | 3,000                         | —     | — | — | 3,000 | 50F2D682□** |
|               | 0.0082  | 6.0             | 3.0 | 7.5  | 3.5±0.5 | 5.0    | 0.5 | 200                              | 10,000 | 3,000                         | —     | — | — | 3,000 | 50F2D822□** |
|               | 0.01    | 6.5             | 3.5 | 7.5  | 3.5±0.5 | 5.0    | 0.5 | 200                              | 8,000  | 2,500                         | —     | — | — | 2,500 | 50F2D103□** |
|               | 0.012   | 6.5             | 3.0 | 8.5  | 3.5±0.5 | 5.0    | 0.5 | 200                              | 8,000  | 2,500                         | —     | — | — | 2,500 | 50F2D123□** |
|               | 0.015   | 6.5             | 3.0 | 8.5  | 3.5±0.5 | 5.0    | 0.5 | 200                              | 8,000  | 2,500                         | —     | — | — | 2,500 | 50F2D153□** |
|               | 0.018   | 6.5             | 3.0 | 8.5  | 3.5±0.5 | 5.0    | 0.5 | 200                              | 8,000  | 2,500                         | —     | — | — | 2,500 | 50F2D183□** |
|               | 0.022   | 7.0             | 4.0 | 9.5  | 3.5±0.5 | 5.0    | 0.5 | 200                              | 8,000  | 2,500                         | —     | — | — | 2,500 | 50F2D223□** |
|               | 0.027   | 7.0             | 4.0 | 9.5  | 3.5±0.5 | 5.0    | 0.5 | 200                              | 5,000  | 2,500                         | —     | — | — | 2,500 | 50F2D273□** |
|               | 0.033   | 7.0             | 4.0 | 9.5  | 3.5±0.5 | 5.0    | 0.5 | 200                              | 5,000  | 2,000                         | —     | — | — | 2,500 | 50F2D333□** |
|               | 0.039   | 7.5             | 4.0 | 9.5  | 5.0±1.0 | 5.0    | 0.5 | 200                              | 5,000  | 2,000                         | —     | — | — | 2,000 | 50F2D393□** |
|               | 0.047   | 8.0             | 5.0 | 10.0 | 5.0±1.0 | 5.0    | 0.5 | 200                              | 4,000  | 2,000                         | —     | — | — | 2,000 | 50F2D473□** |
|               | 0.056   | 8.0             | 4.5 | 10.5 | 5.0±1.0 | 5.0    | 0.5 | 200                              | 4,000  | 2,000                         | —     | — | — | 2,000 | 50F2D563□** |
|               | 0.068   | 8.0             | 5.0 | 10.5 | 5.0±1.0 | 5.0    | 0.5 | 200                              | 4,000  | 1,500                         | —     | — | — | 1,500 | 50F2D683□** |
|               | 0.082   | 8.5             | 5.0 | 10.5 | 5.0±1.0 | 5.0    | 0.5 | 200                              | 3,000  | 1,500                         | —     | — | — | 1,500 | 50F2D823□** |
|               | 0.1     | 9.0             | 6.0 | 11.5 | 5.0±1.0 | 5.0    | 0.5 | 200                              | 3,000  | 1,500                         | —     | — | — | 1,500 | 50F2D104□** |
|               | 0.12    | 9.0             | 5.5 | 12.0 | 5.0±1.0 | 5.0    | 0.5 | 200                              | 3,000  | 1,500                         | —     | — | — | 1,500 | 50F2D124□** |
|               | 0.15    | 9.5             | 6.5 | 12.0 | 5.0±1.0 | 5.0    | 0.5 | 200                              | 2,000  | 1,000                         | —     | — | — | 1,000 | 50F2D154□** |
|               | 0.18    | 10.5            | 7.0 | 12.5 | 7.5±1.5 | 5.0    | 0.5 | 200                              | 2,000  | 1,000                         | —     | — | — | 1,000 | 50F2D184□** |
|               | 0.22    | 11.5            | 7.0 | 12.5 | 7.5±1.5 | 5.0    | 0.5 | 200                              | 2,000  | 1,000                         | —     | — | — | 1,000 | 50F2D224□** |
|               | 0.27    | 11.5            | 7.0 | 14.0 | 7.5±1.5 | 5.0    | 0.6 | 200                              | 2,000  | —                             | 1,000 | — | — | —     | 50F2D274□** |
|               | 0.33    | 13.0            | 7.5 | 15.0 | 7.5±1.5 | 5.0    | 0.6 | 100                              | 1,500  | —                             | 500   | — | — | —     | 50F2D334□** |
|               | 0.39    | 13.5            | 8.0 | 15.0 | 7.5±1.5 | 5.0    | 0.6 | 100                              | 1,000  | —                             | 500   | — | — | —     | 50F2D394□** |
|               | 0.47    | 14.5            | 9.0 | 16.0 | 7.5±1.5 | 5.0    | 0.6 | 100                              | 1,000  | —                             | 500   | — | — | —     | 50F2D474□** |

※LS:Please refer to Taping specification section.

**◆STANDARD SIZE**

□:Capacitance Tolerance    \*\*:Taping

| Rated Voltage | Cap(μF) | Dimensions (mm) |      |         |         |             |     | Typical Packaging Quantity (pcs) |        |                               |    |   |       |              | Part No.     |
|---------------|---------|-----------------|------|---------|---------|-------------|-----|----------------------------------|--------|-------------------------------|----|---|-------|--------------|--------------|
|               |         |                 |      |         |         |             |     | Long Lead type                   |        | Taping Ammo Pack Type - Style |    |   |       |              |              |
|               |         | A               | B    | C       | F       | ※<br>LS±0.5 | d   | Bag                              | Carton | TV                            | TF | — | —     | TS           |              |
| 100 Vdc       | 0.00047 | 6.0             | 3.0  | 7.5     | 3.5±0.5 | 5.0         | 0.5 | 200                              | 10,000 | 3,000                         | —  | — | —     | 3,000        | 100F2D471□** |
|               | 0.00056 | 6.0             | 3.0  | 7.5     | 3.5±0.5 | 5.0         | 0.5 | 200                              | 10,000 | 3,000                         | —  | — | —     | 3,000        | 100F2D561□** |
|               | 0.00068 | 6.0             | 3.0  | 7.5     | 3.5±0.5 | 5.0         | 0.5 | 200                              | 10,000 | 3,000                         | —  | — | —     | 3,000        | 100F2D681□** |
|               | 0.00082 | 6.0             | 3.0  | 7.5     | 3.5±0.5 | 5.0         | 0.5 | 200                              | 10,000 | 3,000                         | —  | — | —     | 3,000        | 100F2D821□** |
|               | 0.001   | 6.0             | 3.0  | 7.5     | 3.5±0.5 | 5.0         | 0.5 | 200                              | 10,000 | 3,000                         | —  | — | —     | 3,000        | 100F2D102□** |
|               | 0.0012  | 6.0             | 3.0  | 7.5     | 3.5±0.5 | 5.0         | 0.5 | 200                              | 10,000 | 3,000                         | —  | — | —     | 3,000        | 100F2D122□** |
|               | 0.0015  | 6.0             | 3.0  | 7.5     | 3.5±0.5 | 5.0         | 0.5 | 200                              | 10,000 | 3,000                         | —  | — | —     | 3,000        | 100F2D152□** |
|               | 0.0018  | 6.0             | 3.0  | 7.5     | 3.5±0.5 | 5.0         | 0.5 | 200                              | 10,000 | 3,000                         | —  | — | —     | 3,000        | 100F2D182□** |
|               | 0.0022  | 6.0             | 3.0  | 7.5     | 3.5±0.5 | 5.0         | 0.5 | 200                              | 10,000 | 3,000                         | —  | — | —     | 3,000        | 100F2D222□** |
|               | 0.0027  | 6.0             | 3.0  | 7.5     | 3.5±0.5 | 5.0         | 0.5 | 200                              | 10,000 | 3,000                         | —  | — | —     | 3,000        | 100F2D272□** |
|               | 0.0033  | 6.0             | 3.0  | 7.5     | 3.5±0.5 | 5.0         | 0.5 | 200                              | 10,000 | 3,000                         | —  | — | —     | 3,000        | 100F2D332□** |
|               | 0.0039  | 6.0             | 3.0  | 7.5     | 3.5±0.5 | 5.0         | 0.5 | 200                              | 10,000 | 3,000                         | —  | — | —     | 3,000        | 100F2D392□** |
|               | 0.0047  | 6.0             | 3.5  | 7.5     | 3.5±0.5 | 5.0         | 0.5 | 200                              | 10,000 | 2,000                         | —  | — | —     | 2,000        | 100F2D472□** |
|               | 0.0056  | 6.0             | 3.5  | 7.5     | 3.5±0.5 | 5.0         | 0.5 | 200                              | 10,000 | 2,000                         | —  | — | —     | 2,000        | 100F2D562□** |
|               | 0.0068  | 6.5             | 3.0  | 9.5     | 5.0±1.0 | 5.0         | 0.5 | 200                              | 8,000  | 2,000                         | —  | — | —     | 2,000        | 100F2D682□** |
|               | 0.0082  | 6.5             | 3.0  | 9.5     | 5.0±1.0 | 5.0         | 0.5 | 200                              | 8,000  | 2,000                         | —  | — | —     | 2,000        | 100F2D822□** |
|               | 0.01    | 7.0             | 4.0  | 10.0    | 5.0±1.0 | 5.0         | 0.5 | 200                              | 5,000  | 2,000                         | —  | — | —     | 2,000        | 100F2D103□** |
|               | 0.012   | 7.5             | 4.0  | 10.0    | 5.0±1.0 | 5.0         | 0.5 | 200                              | 5,000  | 2,000                         | —  | — | —     | 2,000        | 100F2D123□** |
|               | 0.015   | 7.5             | 4.0  | 10.0    | 5.0±1.0 | 5.0         | 0.5 | 200                              | 5,000  | 2,000                         | —  | — | —     | 2,000        | 100F2D153□** |
|               | 0.018   | 8.0             | 4.0  | 10.0    | 5.0±1.0 | 5.0         | 0.5 | 200                              | 4,000  | 2,000                         | —  | — | —     | 2,000        | 100F2D183□** |
|               | 0.022   | 8.0             | 4.0  | 12.0    | 5.0±1.0 | 5.0         | 0.5 | 200                              | 4,000  | 2,000                         | —  | — | —     | 2,000        | 100F2D223□** |
|               | 0.027   | 8.0             | 4.0  | 12.0    | 5.0±1.0 | 5.0         | 0.5 | 200                              | 4,000  | 2,000                         | —  | — | —     | 2,000        | 100F2D273□** |
|               | 0.033   | 8.5             | 4.0  | 12.5    | 5.0±1.0 | 5.0         | 0.5 | 200                              | 4,000  | 2,000                         | —  | — | —     | 2,000        | 100F2D333□** |
|               | 0.039   | 8.5             | 4.5  | 12.5    | 5.0±1.0 | 5.0         | 0.5 | 200                              | 3,000  | 2,000                         | —  | — | —     | 2,000        | 100F2D393□** |
| 0.047         | 9.0     | 4.5             | 12.5 | 5.0±1.0 | 5.0     | 0.5         | 200 | 3,000                            | 1,000  | —                             | —  | — | 1,000 | 100F2D473□** |              |
| 0.056         | 9.0     | 5.5             | 13.0 | 5.0±1.0 | 5.0     | 0.5         | 200 | 3,000                            | 1,000  | —                             | —  | — | 1,000 | 100F2D563□** |              |
| 0.068         | 9.0     | 5.5             | 13.0 | 5.0±1.0 | 5.0     | 0.5         | 200 | 3,000                            | 1,000  | —                             | —  | — | 1,000 | 100F2D683□** |              |
| 0.082         | 9.5     | 6.0             | 13.0 | 7.5±1.5 | 5.0     | 0.5         | 200 | 2,000                            | 1,000  | —                             | —  | — | 1,000 | 100F2D823□** |              |
| 0.1           | 10.5    | 6.5             | 13.5 | 7.5±1.5 | 5.0     | 0.5         | 200 | 2,000                            | 1,000  | —                             | —  | — | 1,000 | 100F2D104□** |              |
| 0.12          | 10.5    | 6.0             | 15.0 | 7.5±1.5 | 5.0     | 0.6         | 200 | 2,000                            | —      | —                             | —  | — | —     | 100F2D124□** |              |
| 0.15          | 11.5    | 7.0             | 15.0 | 7.5±1.5 | 5.0     | 0.6         | 100 | 1,000                            | —      | —                             | —  | — | —     | 100F2D154□** |              |
| 0.18          | 12.5    | 7.0             | 15.5 | 7.5±1.5 | 5.0     | 0.6         | 100 | 1,000                            | —      | —                             | —  | — | —     | 100F2D184□** |              |
| 0.22          | 13.5    | 8.5             | 15.5 | 7.5±1.5 | 5.0     | 0.6         | 100 | 1,000                            | —      | —                             | —  | — | —     | 100F2D224□** |              |
| 200 Vdc       | 0.00047 | 6.0             | 3.0  | 7.5     | 3.5±0.5 | 5.0         | 0.5 | 200                              | 10,000 | 3,000                         | —  | — | —     | 3,000        | 200F2D471□** |
|               | 0.00056 | 6.0             | 3.0  | 7.5     | 3.5±0.5 | 5.0         | 0.5 | 200                              | 10,000 | 3,000                         | —  | — | —     | 3,000        | 200F2D561□** |
|               | 0.00068 | 6.0             | 3.0  | 7.5     | 3.5±0.5 | 5.0         | 0.5 | 200                              | 10,000 | 3,000                         | —  | — | —     | 3,000        | 200F2D681□** |
|               | 0.00082 | 6.0             | 3.0  | 7.5     | 3.5±0.5 | 5.0         | 0.5 | 200                              | 10,000 | 3,000                         | —  | — | —     | 3,000        | 200F2D821□** |
|               | 0.001   | 6.0             | 3.0  | 7.5     | 3.5±1.5 | 5.0         | 0.5 | 200                              | 10,000 | 3,000                         | —  | — | —     | 3,000        | 200F2D102□** |
|               | 0.0012  | 6.0             | 3.0  | 7.5     | 3.5±1.5 | 5.0         | 0.5 | 200                              | 10,000 | 3,000                         | —  | — | —     | 3,000        | 200F2D122□** |
|               | 0.0015  | 6.0             | 3.0  | 7.5     | 3.5±1.5 | 5.0         | 0.5 | 200                              | 10,000 | 3,000                         | —  | — | —     | 3,000        | 200F2D152□** |
|               | 0.0018  | 6.0             | 3.0  | 7.5     | 3.5±1.5 | 5.0         | 0.5 | 200                              | 10,000 | 3,000                         | —  | — | —     | 3,000        | 200F2D182□** |
|               | 0.0022  | 6.0             | 3.0  | 7.5     | 3.5±1.5 | 5.0         | 0.5 | 200                              | 10,000 | 3,000                         | —  | — | —     | 3,000        | 200F2D222□** |
|               | 0.0027  | 6.5             | 3.5  | 7.5     | 3.5±1.5 | 5.0         | 0.5 | 200                              | 10,000 | 3,000                         | —  | — | —     | 3,000        | 200F2D272□** |
|               | 0.0033  | 6.5             | 3.5  | 9.5     | 3.5±1.5 | 5.0         | 0.5 | 200                              | 10,000 | 2,000                         | —  | — | —     | 2,000        | 200F2D332□** |
|               | 0.0039  | 6.5             | 3.5  | 9.5     | 5.0±1.0 | 5.0         | 0.5 | 200                              | 8,000  | 2,000                         | —  | — | —     | 2,000        | 200F2D392□** |
|               | 0.0047  | 7.0             | 3.5  | 9.5     | 5.0±1.0 | 5.0         | 0.5 | 200                              | 8,000  | 2,000                         | —  | — | —     | 2,000        | 200F2D472□** |
|               | 0.0056  | 7.5             | 4.0  | 9.5     | 5.0±1.0 | 5.0         | 0.5 | 200                              | 5,000  | 2,000                         | —  | — | —     | 2,000        | 200F2D562□** |
|               | 0.0068  | 7.5             | 4.0  | 10.0    | 5.0±1.0 | 5.0         | 0.5 | 200                              | 5,000  | 2,000                         | —  | — | —     | 2,000        | 200F2D682□** |
|               | 0.0082  | 7.0             | 4.0  | 12.0    | 5.0±1.0 | 5.0         | 0.5 | 200                              | 5,000  | 2,000                         | —  | — | —     | 2,000        | 200F2D822□** |
|               | 0.01    | 7.5             | 4.5  | 12.5    | 5.0±1.0 | 5.0         | 0.5 | 200                              | 4,000  | 2,000                         | —  | — | —     | 2,000        | 200F2D103□** |
|               | 0.012   | 8.0             | 4.5  | 12.5    | 5.0±1.0 | 5.0         | 0.5 | 200                              | 4,000  | 1,000                         | —  | — | —     | 1,000        | 200F2D123□** |
|               | 0.015   | 8.0             | 4.5  | 12.5    | 5.0±1.0 | 5.0         | 0.5 | 200                              | 4,000  | 1,000                         | —  | — | —     | 1,000        | 200F2D153□** |
|               | 0.018   | 8.5             | 5.0  | 12.5    | 5.0±1.0 | 5.0         | 0.5 | 200                              | 4,000  | 1,000                         | —  | — | —     | 1,000        | 200F2D183□** |
|               | 0.022   | 9.0             | 5.0  | 13.0    | 5.0±1.0 | 5.0         | 0.5 | 200                              | 3,000  | 1,000                         | —  | — | —     | 1,000        | 200F2D223□** |
|               | 0.027   | 9.5             | 5.5  | 13.0    | 5.0±1.0 | 5.0         | 0.5 | 200                              | 3,000  | 1,000                         | —  | — | —     | 1,000        | 200F2D273□** |
|               | 0.033   | 10.0            | 6.0  | 13.0    | 5.0±1.0 | 5.0         | 0.5 | 200                              | 3,000  | 1,000                         | —  | — | —     | 1,000        | 200F2D333□** |
|               | 0.039   | 10.0            | 6.0  | 15.0    | 7.5±1.5 | 5.0         | 0.5 | 200                              | 3,000  | 750                           | —  | — | —     | 750          | 200F2D393□** |
| 0.047         | 11.0    | 6.0             | 15.0 | 7.5±1.5 | 5.0     | 0.5         | 200 | 2,000                            | 750    | —                             | —  | — | 750   | 200F2D473□** |              |
| 0.056         | 11.0    | 6.5             | 15.0 | 7.5±1.5 | 5.0     | 0.5         | 100 | 2,000                            | —      | 500                           | —  | — | —     | 200F2D563□** |              |
| 0.068         | 11.5    | 7.0             | 15.0 | 7.5±1.5 | 5.0     | 0.6         | 100 | 2,000                            | —      | 500                           | —  | — | —     | 200F2D683□** |              |
| 0.082         | 11.5    | 7.0             | 18.0 | 7.5±1.5 | 5.0     | 0.6         | 100 | 2,000                            | —      | —                             | —  | — | —     | 200F2D823□** |              |
| 0.1           | 12.5    | 7.5             | 18.5 | 7.5±1.5 | 5.0     | 0.6         | 100 | 1,000                            | —      | —                             | —  | — | —     | 200F2D104□** |              |