

Ultra-high Voltage Ceramic Capacitors

Molded type with metal terminals For distribution lines

FD(Eac: 10 to 25kV) series

Issue date: June 2011

[•] All specifications are subject to change without notice.

[•] Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

&TDK

Ultra-high Voltage Ceramic Capacitors Molded Type with Metal Terminals FD Series

Conformity to RoHS Directive

FOR HIGH VOLTAGE POWER CIRCUIT/AC HEAVY DUTY

Temperature range: -30 to +85°C/Capacitance temperature characteristics: Y5P (±10%) CLASS 2 HIGH DIELECTRIC

Molded from resins that provide outstanding insulation and moisture resistance, these capacitors are ideal for high-voltage power circuits in electrical power transmission and receiving devices.

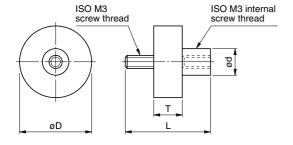
FEATURES

- They are compact in size and exhibit excellent low-loss, lowdistortion characteristics.
- Capacitance values are largely unaffected by variations in applied voltage.
- Internal screw thread design simplifies mounting requirements.

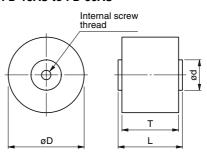
APPLICATIONS

- High voltage surge absorbers, gas circuit breakers in electrical power transmission and receiving devices, and lightning arresters
- Voltage distribution elements in high-voltage measuring devices.
- Impedance matching in transformers and high-voltage AC circuits.

FD-9AU to FD-16AU



FD-18AU to FD-36AU



CAPACITANCE/ELECTRICAL CHARACTERISTICS/DIMENSIONS

| Part No. | Application | Capacitance (pF)±10% | Withstand voltage Erms(kV) | Insulation resistance (MΩ)min. | AC corona starting voltage Erms(kV) min. [3PC*] | Dimensions (mm) | | | | — Internal |
|----------|---------------------------|-------------------------|----------------------------------|--------------------------------|--|-----------------|------|------|----|------------|
| | | | | | | øD | Т | L | ød | screw |
| FD-9AU | – – AC.10kVr.m.s. – | 100 | 15 | 10,000 | 12 | 16 | 15 | 27 | 5 | ISO M3 |
| FD-10AU | | 250 | 15 | 10,000 | 12 | 21 | 15 | 27 | 5 | ISO M3 |
| FD-11AU | | 500 | 15 | 10,000 | 12 | 28 | 15 | 27 | 5 | ISO M3 |
| FD-12AU | | 1,000 | 15 | 10,000 | 12 | 38 | 15 | 27 | 5 | ISO M3 |
| FD-16AU | AC.13kVr.m.s. | 250 | 20 | 10,000 | 16 | 26 | 18.5 | 30.5 | 5 | ISO M3 |
| FD-18AU | | 500 | 20 | 10,000 | 16 | 34 | 23.5 | 27.5 | 10 | ISO M4 |
| FD-20AU | | 1,000 | 20 | 10,000 | 16 | 48 | 23.5 | 27.5 | 15 | ISO M5 |
| FD-22AU | – AC.20kVr.m.s. | 250 | 30 | 10,000 | 24 | 30 | 29 | 33 | 10 | ISO M4 |
| FD-24AU | | 500 | 30 | 10,000 | 24 | 40 | 29 | 33 | 15 | ISO M5 |
| FD-33AU | – AC.25kVr.m.s. | 250 | 40 | 10,000 | 32 | 34 | 35 | 39 | 10 | ISO M4 |
| FD-36AU | | 500 | 40 | 10,000 | 32 | 48 | 35 | 39 | 15 | ISO M5 |

^{*} PC:Pico coulomb

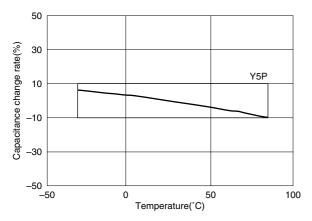
• In addition to the above, products are available that can be used in SF6 gas without modification (S type: molded with epoxide resin; alumina filler).

- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.
- All specifications are subject to change without notice.

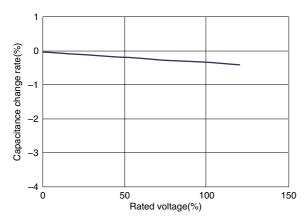




TYPICAL CAPACITANCE CHARACTERISTICS CAPACITANCE vs. TEMPERATURE CHARACTERISTICS



CAPACITANCE vs. AC VOLTAGE CHARACTERISTICS



PRECAUTIONS

(1) During transportation and storage

- Do not transport or store where the capacitor will be exposed to high temperature or high humidity.
- Do not expose to poisonous gases such as H₂SO₄, HCl, or HNO₃.
- Avoid excessive impact such as that caused by falling.

(2) During operation

- Avoid contact with electrolytes such as perspiration. Do not touch with bare hands.
- Avoid excessive impact such as that caused by falling.
- Do not apply solder to stud terminals.
- Do not re-machine the terminals.

(3) Usage

• Make sure that the capacitor is not exposed to radiant heat from chambers or transformers.

- For more information about products with other capacitance or other data, please contact us.
- All specifications are subject to change without notice.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Speciality Ceramic Capacitors category:

Click to view products by TDK manufacturer:

Other Similar products are found below:

715CPP403CP571ZK02 416462360 715C15KTD19 715C20KTD14 715C30KTT94 118FBB1R0B100TT CSM-50-40X40X4-G-3R3-D B58035U9504M052 416461020 416461150 416463050 416463100 KJF-4.82/480 416461030 416461050 416461080 416463260 416464310 416466150 715C10DKS20 116ZM103M050TT 116RF100M100TT 116RK101M100TT 116UL102M100TT 111TG101M100TT 316523360 316523370 415047015 415047018 415047225 416300564 416461360 416463263 416533250 416533300 416533350 416463083 415047010 415047020 275.545-504000 416466100 KJF-0.83/525 275.525-495500 275.525-601700 275.525-701400 416463033 275.525-801100 118CL101M100TT 116RAR06A100TT 416461310