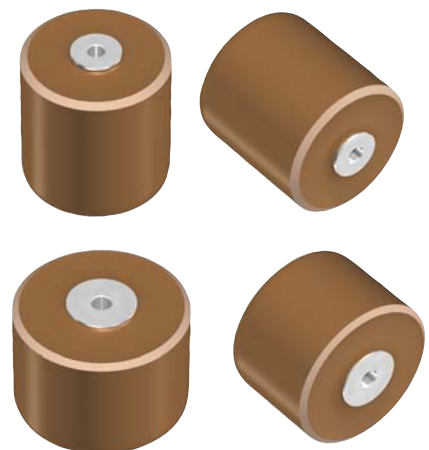


Ultra high voltage ceramic capacitors

With metal terminals

For distribution lines

FD/MD series




REMINDERS FOR USING THESE PRODUCTS
(1) During transportation and storage

Do not transport or store where the products 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 products are not exposed to radiant heat from chambers or transformers.

(4) Others

The products listed on this catalog are not designed or warranted to meet the requirements of the applications listed below, whose performance and/or quality require a more stringent level of safety or reliability, or whose failure, malfunction or trouble could cause serious damage to society, person or property.

If you intend to use the products in the applications listed below or if you have special requirements exceeding the range or conditions set forth in the each catalog, please contact us.

(1) Aerospace/aviation equipment

(2) Transportation equipment (cars, electric trains, ships, etc.)

(3) Medical equipment

(4) Power-generation control equipment

(5) Atomic energy-related equipment

(6) Seabed equipment

(7) Transportation control equipment

(8) Public information-processing equipment

(9) Military equipment

(10) Electric heating apparatus, burning equipment

(11) Disaster prevention/crime prevention equipment

(12) Safety equipment

(13) Other applications that are not considered general-purpose applications

When designing your equipment even for general-purpose applications, you are kindly requested to take into consideration securing protection circuit/device or providing backup circuits in your equipment.

Ultra high voltage ceramic capacitors

Product compatible with RoHS directive

With metal terminals

For distribution lines

Overview of the FD/MD series

FEATURES

- FD series (rated voltage Eac:10 to 25 kV) and MD series (rated voltage Eac:20kV) available
- Molded type metal screw terminals for easy mounting
- Uses high-reliability mold resin
- Extremely stable temperature characteristics

APPLICATION

Distribution line switches (zero-phase detection, demarcation point), traded volume detection

OPERATING TEMPERATURE RANGE, PRODUCT WEIGHT

| Part No. | Sub part No. | Temperature range | | Individual weight (g) |
|----------|------------------|-------------------------------|-----------------------------|--------------------------|
| | | Operating temperature (°C) | Storage temperature (°C) | |
| FD-9A | 60710YP101K4AAA | -30 to +85 | -30 to +85 | 10 |
| FD-10A | 60715YP251K4AAAU | -30 to +85 | -30 to +85 | 16 |
| FD-11A | 60723YP501K4AAAU | -30 to +85 | -30 to +85 | 30 |
| FD-12A | 60731YP102K4AAAU | -30 to +85 | -30 to +85 | 54 |
| FD-16A | 60718YP251K4CAAU | -30 to +85 | -30 to +85 | 31 |
| FD-18A | 60726YP501K4CAAU | -30 to +85 | -30 to +85 | 71 |
| FD-20A | 60737YP102K4CAAU | -30 to +85 | -30 to +85 | 141 |
| FD-22A | 60723YP251K4DAA | -30 to +85 | -30 to +85 | 67 |
| FD-24A | 60732YP501K4DAAU | -30 to +85 | -30 to +85 | 127 |
| FD-33A | 60726YP251K4EAAU | -30 to +85 | -30 to +85 | 107 |
| FD-36A | 60736YP501K4EAAU | -30 to +85 | -30 to +85 | 117 |
| MD-1A | 60729CH500J3KAA | -30 to +85 | -30 to +85 | 101 |

• Secondary-molded AU type is also available.

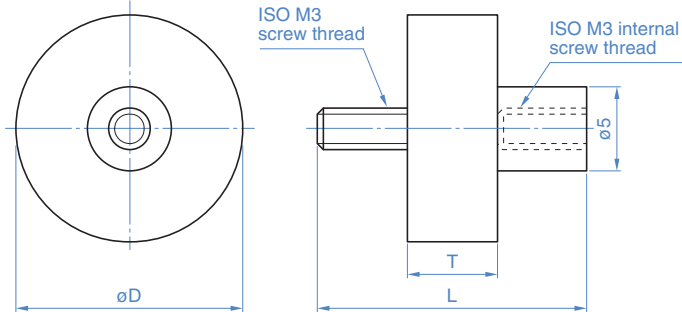
○ RoHS Directive Compliant Product: See the following for more details. <https://product.tdk.com/info/en/environment/rohs/index.html>

 Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use.
Please note that the contents may change without any prior notice due to reasons such as upgrading.

FD series

SHAPE & DIMENSIONS

FD-9A to FD-16A

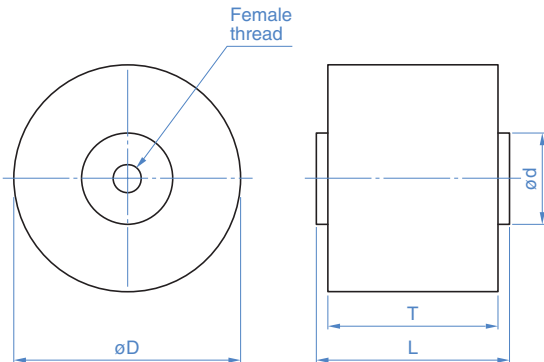


MARKINGS

| | |
|--------|--|
| FD-9A | Part No. |
| 101K | Nominal capacitance and tolerance code |
| AC10kV | Rated voltage |
| TDK | Manufacturer's name (TDK or TDK logo ma) |
| 1234 | Lot No. |

| Part No. | Sub part No. | ϕD (mm) | T (mm) | L (mm) |
|----------|------------------|------------------|-----------|-----------|
| FD-9A | 60710YP101K4AAA | 16 | 15 | 27 |
| FD-10A | 60715YP251K4AAAU | 21 | 15 | 27 |
| FD-11A | 60723YP501K4AAAU | 28 | 15 | 27 |
| FD-12A | 60731YP102K4AAAU | 38 | 15 | 27 |
| FD-16A | 60718YP251K4CAAU | 26 | 18.5 | 30.5 |

FD-18A to FD-36A



MARKINGS

| | |
|--------|--|
| FD-22A | Part No. |
| 251K | Nominal capacitance and tolerance code |
| AC20kV | Rated voltage |
| TDK | Manufacturer's name (TDK or TDK logo ma) |
| 1234 | Lot No. |

| Part No. | Sub part No. | ϕD (mm) | T (mm) | L (mm) | ϕd (mm) | Internal screw |
|----------|------------------|------------------|-----------|-----------|------------------|----------------|
| FD-18A | 60726YP501K4CAAU | 34 | 23.5 | 27.5 | 10 | ISO M4 |
| FD-20A | 60737YP102K4CAAU | 48 | 23.5 | 27.5 | 15 | ISO M5 |
| FD-22A | 60723YP251K4DAA | 30 | 29 | 33 | 10 | ISO M4 |
| FD-24A | 60732YP501K4DAAU | 40 | 29 | 33 | 15 | ISO M5 |
| FD-33A | 60726YP251K4EAAU | 34 | 35 | 39 | 10 | ISO M4 |
| FD-36A | 60736YP501K4EAAU | 48 | 35 | 39 | 15 | ISO M5 |

60723YP251K4DAAFD series

ELECTRICAL CHARACTERISTICS

CHARACTERISTICS SPECIFICATION TABLE

Class 2 (Temperature stable)

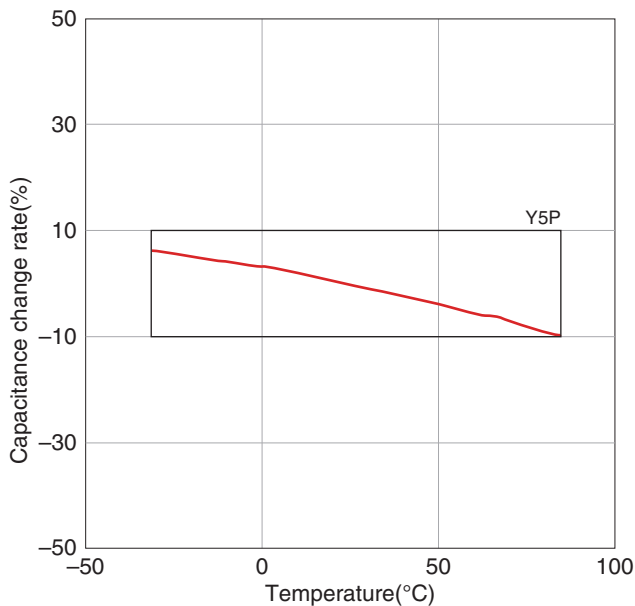
Temperature characteristics: Y5P(-30 to +85°C, ±10%)

| Part No. | Sub part No. | Rated voltage | Capacitance | Supported insulation classes | Withstanding voltage | Dissipation factor(tanδ) | Insulation resistance | AC corona starting voltage [3PC*] |
|----------|------------------|---------------|-------------|------------------------------|-------------------------------------|--------------------------|-----------------------|-----------------------------------|
| | | (kVAC) | (pF) | | [1min, in insulating liquid] (kVAC) | | | |
| FD-9A | 60710YP101K4AAA | 10 | 100±10% | — | 15 | 0.2 | 10000 | 12 |
| FD-10A | 60715YP251K4AAAU | 10 | 250±10% | — | 15 | 0.2 | 10000 | 12 |
| FD-11A | 60723YP501K4AAAU | 10 | 500±10% | — | 15 | 0.2 | 10000 | 12 |
| FD-12A | 60731YP102K4AAAU | 10 | 1,000±10% | — | 15 | 0.2 | 10000 | 12 |
| FD-16A | 60718YP251K4CAAU | 13 | 250±10% | — | 20 | 0.2 | 10000 | 16 |
| FD-18A | 60726YP501K4CAAU | 13 | 500±10% | — | 20 | 0.2 | 10000 | 16 |
| FD-20A | 60737YP102K4CAAU | 13 | 1,000±10% | — | 20 | 0.2 | 10000 | 16 |
| FD-22A | 60723YP251K4DAA | 20 | 250±10% | 6号A | 30 | 0.2 | 10000 | 24 |
| FD-24A | 60732YP501K4DAAU | 20 | 500±10% | 6号A | 30 | 0.2 | 10000 | 24 |
| FD-33A | 60726YP251K4EAAU | 25 | 250±10% | 10号A | 40 | 0.2 | 10000 | 32 |
| FD-36A | 60736YP501K4EAAU | 25 | 500±10% | 10号A | 40 | 0.2 | 10000 | 32 |

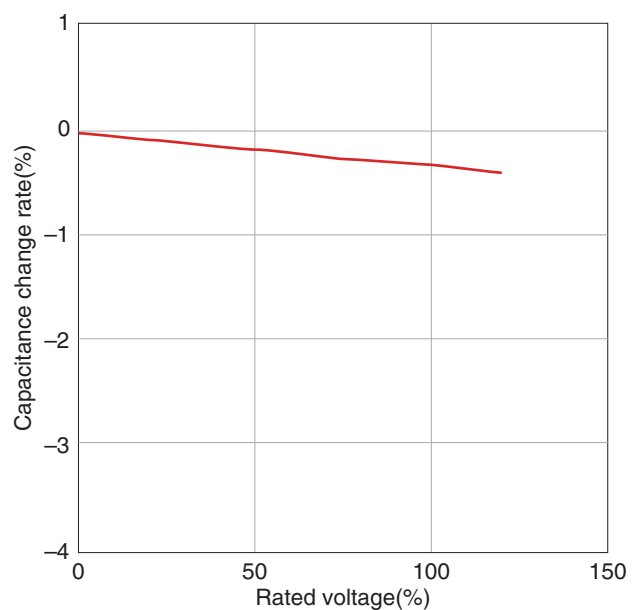
* PC : Pico coulomb.

• Secondary-molded AU type is also available.

CAPACITANCE VS. TEMPERATURE CHARACTERISTICS

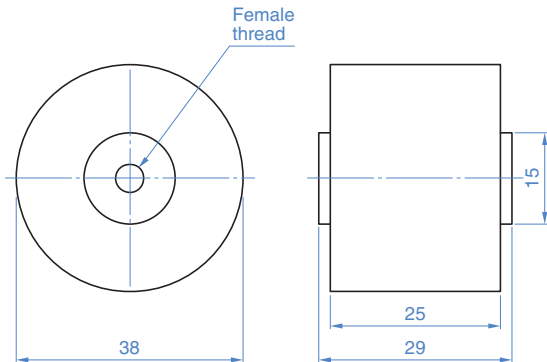


CAPACITANCE VS. AC VOLTAGE CHARACTERISTICS



MD series

SHAPE & DIMENSIONS



MARKINGS

| | |
|---------|-------------------------------------|
| MD-1A | Part No. |
| 5 0 0 J | Nominal capacitance and tolerance c |
| AC20kV | Rated voltage |
| T D K | Manufacturer's name (TDK or TDK Ic |
| 1 2 3 4 | Lot No. |

ELECTRICAL CHARACTERISTICS

CHARACTERISTICS SPECIFICATION TABLE

Class 1 (low dielectric)

Temperature characteristics: C0H(-55 to +125°C, 0±60ppm/°C)

| Part No. | Sub part No. | Rated voltage (kVAC) | Capacitance (pF) | Supported insulation classes | Withstanding voltage [1min, in insulating liquid] (kVAC) | Dissipation factor(tanδ) (%) max. | Insulation resistance (MΩ) min. | AC corona starting voltage [3PC*] (kVAC) min. |
|----------|-----------------|-------------------------|---------------------|------------------------------|--|--------------------------------------|------------------------------------|--|
| MD-1A | 60729CH500J3KAA | 20 | 50±5% | 6号A | 30 | 0.2 | 10000 | 24 |

* PC : Pico coulomb.



Стандарт Электрон Связь

Мы молодая и активно развивающаяся компания в области поставок электронных компонентов. Мы поставляем электронные компоненты отечественного и импортного производства напрямую от производителей и с крупнейших складов мира.

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