

High Voltage Ceramic Disc Capacitors, Rated 4 to 15 kVDC, Temp. Char. Y5T

Series: **MDU**



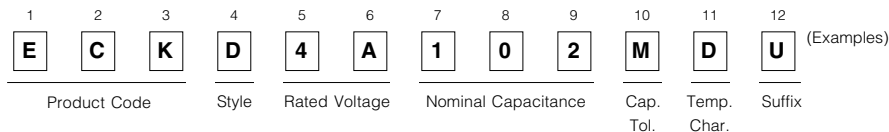
■ Features

- Wide products range of 4 to 15 kVDC
- Voltage stable type dielectric materials applied for high voltage application
- Flame-retardant insulating coating applied

■ Recommended Applications

- High voltage power supply
- High voltage circuit of TV and CRT display
- High voltage DC circuit

■ Explanation of Part Numbers



■ Specifications

| Characteristics | Specifications |
|----------------------------------|--|
| Operating Temperature Range | -25 to 85 °C |
| Rated Voltage | 4 kVDC to 15 kVDC |
| Dielectric Withstanding Voltage* | 150 % of the rated voltage for 1 to 5 seconds |
| Capacitance | Within tolerance, when measured at 1 kHz±20 %, 1 to 5 Vrms, and 20 °C |
| Dissipation Factor (tan δ) | 0.025 max. at 1 kHz±20 %, 1 to 5 Vrms, and 20 °C |
| Insulation Resistance | 10000 MΩ min. at 500 VDC and 1 minute electrification |
| Temperature Characteristics | Capacitance Change: +20, -30 % max. over the temperature range of -25 to 85 °C |

* Dielectric Withstanding Voltage test for the rated voltage of 6 kVDC and above shall be conducted in insulating oil.

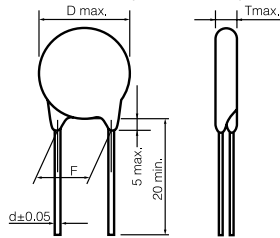
■ Precautions for Handling

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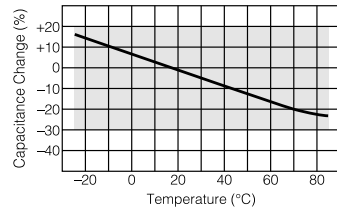
■ Packaging Informations

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■ Dimensions in mm (not to scale)



■ Typical Temperature Characteristics



■ Ratings and Characteristics

| Rated Voltage | Part Number | Capacitance | | Dimensions in mm | | | |
|---------------|--------------|-------------------|---------------|------------------|--------|----------|------|
| | | Nominal Cap. (pF) | Tolerance (%) | D max. | T max. | F | d |
| 4 kVDC | ECKD3G101MDU | 100 | ±20 | 7.0 | 7.0 | 7.5±2.0 | 0.65 |
| | ECKD3G151MDU | 150 | ±20 | 7.0 | 7.0 | 7.5±2.0 | 0.65 |
| | ECKD3G221MDU | 220 | ±20 | 7.0 | 7.0 | 7.5±2.0 | 0.65 |
| | ECKD3G331MDU | 330 | ±20 | 8.0 | 7.0 | 7.5±2.0 | 0.65 |
| | ECKD3G471MDU | 470 | ±20 | 8.5 | 7.0 | 7.5±2.0 | 0.65 |
| | ECKD3G681MDU | 680 | ±20 | 9.5 | 7.0 | 10.0±2.0 | 0.65 |
| | ECKD3G102MDU | 1000 | ±20 | 11.5 | 7.0 | 10.0±2.0 | 0.65 |
| | ECKD3G152MDU | 1500 | ±20 | 13.5 | 7.0 | 10.0±2.0 | 0.65 |
| 6 kVDC | ECKD3G222MDU | 2200 | ±20 | 16.0 | 7.0 | 10.0±2.0 | 0.65 |
| | ECKD3J101MDU | 100 | ±20 | 8.0 | 8.0 | 10.0±2.0 | 0.65 |
| | ECKD3J151MDU | 150 | ±20 | 8.0 | 8.0 | 10.0±2.0 | 0.65 |
| | ECKD3J221MDU | 220 | ±20 | 8.0 | 8.0 | 10.0±2.0 | 0.65 |
| | ECKD3J331MDU | 330 | ±20 | 10.5 | 8.0 | 10.0±2.0 | 0.80 |
| | ECKD3J471MDU | 470 | ±20 | 11.5 | 8.0 | 10.0±2.0 | 0.80 |
| | ECKD3J681MDU | 680 | ±20 | 13.0 | 8.0 | 10.0±2.0 | 0.80 |
| | ECKD3J102MDU | 1000 | ±20 | 15.0 | 8.0 | 10.0±2.0 | 0.80 |
| 8 kVDC | ECKD3J152MDU | 1500 | ±20 | 17.5 | 8.0 | 10.0±2.0 | 0.80 |
| | ECKD3J222MDU | 2200 | ±20 | 21.5 | 8.0 | 10.0±2.0 | 0.80 |
| | ECKD3K101MDU | 100 | ±20 | 8.0 | 9.0 | 10.0±2.0 | 0.65 |
| | ECKD3K151MDU | 150 | ±20 | 8.0 | 9.0 | 10.0±2.0 | 0.65 |
| | ECKD3K221MDU | 220 | ±20 | 8.5 | 9.0 | 10.0±2.0 | 0.65 |
| | ECKD3K331MDU | 330 | ±20 | 10.0 | 9.0 | 10.0±2.0 | 0.65 |
| | ECKD3K471MDU | 470 | ±20 | 11.5 | 9.0 | 10.0±2.0 | 0.80 |
| | ECKD3K681MDU | 680 | ±20 | 13.5 | 9.0 | 10.0±2.0 | 0.80 |
| 10 kVDC | ECKD3K102MDU | 1000 | ±20 | 16.5 | 9.0 | 10.0±2.0 | 0.80 |
| | ECKD3K152MDU | 1500 | ±20 | 18.5 | 9.0 | 10.0±2.0 | 0.80 |
| | ECKD4A101MDU | 100 | ±20 | 8.0 | 9.0 | 10.0±2.0 | 0.65 |
| | ECKD4A151MDU | 150 | ±20 | 8.5 | 9.0 | 10.0±2.0 | 0.65 |
| | ECKD4A221MDU | 220 | ±20 | 9.5 | 9.0 | 10.0±2.0 | 0.65 |
| | ECKD4A331MDU | 330 | ±20 | 11.5 | 9.0 | 10.0±2.0 | 0.80 |
| | ECKD4A471MDU | 470 | ±20 | 13.0 | 9.0 | 10.0±2.0 | 0.80 |
| | ECKD4A681MDU | 680 | ±20 | 15.0 | 9.0 | 10.0±2.0 | 0.80 |
| 15 kVDC | ECKD4A102MDU | 1000 | ±20 | 16.5 | 9.0 | 10.0±2.0 | 0.80 |
| | ECKD4C101MDU | 100 | ±20 | 8.0 | 10.0 | 10.0±2.0 | 0.65 |
| | ECKD4C151MDU | 150 | ±20 | 9.0 | 10.0 | 10.0±2.0 | 0.65 |
| | ECKD4C221MDU | 220 | ±20 | 10.0 | 10.0 | 10.0±2.0 | 0.65 |
| | ECKD4C331MDU | 330 | ±20 | 11.5 | 10.0 | 10.0±2.0 | 0.80 |
| | ECKD4C471MDU | 470 | ±20 | 13.5 | 10.0 | 10.0±2.0 | 0.80 |
| | ECKD4C681MDU | 680 | ±20 | 15.0 | 10.0 | 12.5±2.0 | 0.80 |
| | ECKD4C102MDU | 1000 | ±20 | 19.0 | 10.0 | 12.5±2.0 | 0.80 |