

KCT8G series / Doorknob Type High Voltage Ceramic Capacitor

General Technical Characteristics 一般特性

Excellent withstand voltage, excellent behavior on pulse and fast discharge conditions.
 耐压高，在脉冲和快速放电条件下表现优异。
 Low dissipation factor, low partial discharge.
 耗散因素低，局部放电低。
 Coated with flame-retardant epoxy resin. Coated and uncoated devices available.
 阻燃环氧树脂包封。包封及不包封产品均可提供。

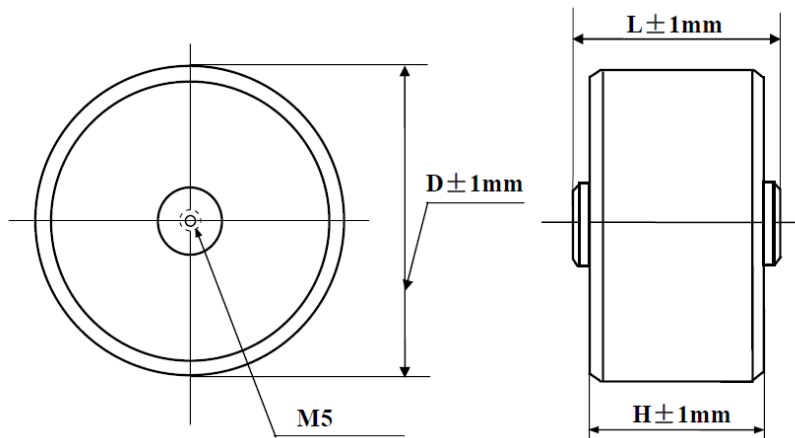
Typical Applications 典型应用

Used in electrical equipment and the pulse energy equipment of power transmission and distribution systems.
 广泛应用于送电、配电系统的电力设备和处理脉冲能量的设备中。
 For power compensation, current limiting, filtering, metering, energy storage and voltage divider products.
 如：功率补偿、限流、滤波、计量、储能以及分电压等产品中。

Electrical Characteristics 电气特性

Operating Temperature 操作温度: -30° C ~ +85° C
 Rated Voltage 额定电压: 10KV ~ 150KV DC
 Capacitance Range 电容量范围: 20pF ~ 10000pF
 Capacitance Tolerance 电容量偏差: ±5% (J), ±10%(K)
 Test Voltage 耐电压: 1.5 U_R for 1 min.
 High Frequency 高频: 1KHz-550KHz
 Partial discharge 局部放电: 10PC max
 Insulation resistance 绝缘电阻: 100,000 MΩ max

Outline Drawing 外形图



Part Number System 产品编码说明

| | | | | | |
|--------------|-------------|------------------|--------------|----------------------------------|-----------|
| <u>KCT8G</u> | <u>40KV</u> | <u>DL</u> | <u>102</u> | <u>K</u> | <u>38</u> |
| 型号代码 | 额定电压 | 温度特性 | 容量 | 容量偏差 | 直径 |
| Series Code: | Voltage: | Temperature | Capacitance: | Cap. Tol.: | Diameter: |
| KCT8G | 40KV | Characteristics: | 102: 1000pF | J: ± 5%, K: ± 10% M: ± 20% | 38: 38mm |
| | | Code: DL * | | | |

*Temperature Characteristics 温度特性

| Code 代号 | Temperature Characteristics 温度特性 | Max Capacitance Change 容量变化范围 | Insulation Resistance 绝缘电阻 min (MΩ) | Dissipation Factor 损耗角正 max | Temperature Range 温度范围 |
|------------|-------------------------------------|----------------------------------|--|--------------------------------|---------------------------|
| DL | N4700 | ±28% | 200000 | 0.2% | -25~+85°C |
| | | ±33% | 200000 | 0.2% | |
| S | Y5S | +10 ~ -22% | 100000 | 0.2% | ±22% |
| D | Y5T | +22 ~ -33% | 100000 | 0.5% | -25~+85°C |
| E | Y5U | +22 ~ -56% | 10000 | 2% | -25~+85°C |
| F | Y5V | +22 ~ -80% | 10000 | 2% | -25~+85°C |
| NP0 | NP0 | ±330PPM/° C | 1000000 | 0.6% | -25~+85°C |

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■ Electrical Specification & Part Numbers Reference 规格型号参考 (mm)

| Capacitance | Voltage KV DC | Tol. % | D | H | L | M | Ceramic | Part Number |
|-------------|---------------|--------|-----|----|----|---|---------|-------------------|
| 1000pF | 10 | 10 | 30 | 16 | 20 | 5 | N4700 | KCT8G10KVDL102K30 |
| 2200pF | 10 | 20 | 38 | 16 | 20 | 5 | N4700 | KCT8G10KVDL222M38 |
| 8000pF | 10 | 20 | 60 | 16 | 20 | 5 | N4700 | KCT8G10KVDL802M60 |
| 370pF | 15 | 10 | 20 | 20 | 24 | 5 | N4700 | KCT8G15KVDL371K20 |
| 560pF | 15 | 10 | 20 | 18 | 22 | 5 | N4700 | KCT8G15KVDL561K20 |
| 1000pF | 15 | 10 | 30 | 18 | 22 | 5 | N4700 | KCT8G15KVDL102K30 |
| 2200pF | 15 | 20 | 45 | 18 | 22 | 5 | N4700 | KCT8G15KVDL222M45 |
| 3000pF | 15 | 20 | 45 | 18 | 22 | 5 | N4700 | KCT8G15KVDL302M45 |
| 5300pF | 15 | 20 | 60 | 18 | 22 | 5 | N4700 | KCT8G15KVDL532M60 |
| 280pF | 20 | 10 | 20 | 20 | 24 | 5 | N4700 | KCT8G20KVDL281K20 |
| 1000pF | 20 | 10 | 30 | 20 | 24 | 5 | N4700 | KCT8G20KVDL102K30 |
| 2200pF | 20 | 20 | 45 | 20 | 24 | 5 | N4700 | KCT8G20KVDL222M45 |
| 4000pF | 20 | 20 | 60 | 20 | 24 | 5 | N4700 | KCT8G20KVDL402M60 |
| 1000pF | 20 | 20 | 60 | 18 | 22 | 5 | Y5T | KCT8G20KVD103M60 |
| 3000pF | 20 | 20 | 60 | 18 | 22 | 5 | Y5V | KCT8G20KVF303M60 |
| 400pF | 30 | 10 | 20 | 20 | 24 | 5 | N4700 | KCT8G30KVDL401K20 |
| 1000pF | 30 | 10 | 38 | 22 | 26 | 5 | N4700 | KCT8G30KVDL102K38 |
| 2200pF | 30 | 20 | 52 | 24 | 28 | 5 | N4700 | KCT8G30KVDL222M52 |
| 3000pF | 30 | 20 | 60 | 24 | 28 | 5 | N4700 | KCT8G30KVDL302M60 |
| 5300pF | 30 | 20 | 60 | 24 | 28 | 5 | Y5S | KCT8G30KVS502M60 |
| 20000pF | 30 | 20 | 60 | 24 | 28 | 5 | Y5V | KCT8G30KVF203M60 |
| 100pF | 40 | 10 | 20 | 30 | 34 | 5 | N4700 | KCT8G40KVDL101K20 |
| 150pF | 40 | 10 | 20 | 24 | 28 | 5 | N4700 | KCT8G40KVDL151K20 |
| 200pF | 40 | 10 | 20 | 24 | 28 | 5 | N4700 | KCT8G40KVDL201K20 |
| 440pF | 40 | 10 | 30 | 30 | 34 | 5 | N4700 | KCT8G40KVDL441K30 |
| 500pF | 40 | 10 | 30 | 30 | 34 | 5 | N4700 | KCT8G40KVDL501K30 |
| 1000pF | 40 | 10 | 38 | 24 | 28 | 5 | N4700 | KCT8G40KVDL102K38 |
| 1000pF | 40 | 10 | 45 | 30 | 34 | 5 | N4700 | KCT8G40KVDL102K45 |
| 2200pF | 40 | 20 | 52 | 16 | 30 | 5 | N4700 | KCT8G40KVDL222M52 |
| 2200pF | 40 | 20 | 60 | 30 | 34 | 5 | N4700 | KCT8G40KVDL222M60 |
| 3300pF | 40 | 20 | 60 | 30 | 34 | 5 | Y5S | KCT8G40KVS332M60 |
| 5000pF | 40 | 20 | 60 | 30 | 34 | 5 | Y5T | KCT8G40KVD502M60 |
| 10000pF | 40 | 20 | 60 | 30 | 34 | 5 | Y5U | KCT8G40KVE103M60 |
| 15000pF | 40 | 20 | 60 | 30 | 34 | 5 | Y5V | KCT8G40KVF153M60 |
| 10000pF | 70 | 20 | 100 | 66 | 70 | 5 | Y5U | KCT8G70KVE103M100 |
| 5000pF | 80 | 20 | 100 | 70 | 74 | 5 | Y5T | KCT8G80KVD502M100 |
| 700pF | 100 | 20 | 60 | 80 | 84 | 5 | Y5S | KCT8G100KVS701M60 |
| 1000pF | 100 | 20 | 60 | 80 | 84 | 5 | Y5T | KCT8G100KVD102M60 |
| 2000pF | 100 | 20 | 72 | 80 | 84 | 5 | Y5T | KCT8G100KVD202M72 |
| 3000pF | 100 | 20 | 85 | 80 | 84 | 5 | Y5T | KCT8G100KVD302M85 |

Remark: Customization for special specification and requirement is available.