



## DXU Range HV Ceramic Capacitors 10kV – 50kV - Specification Sheet



### Basic Description

These High Voltage Capacitors are designed to meet the stringent requirements of High Voltage applications. They are designed for applications which require a low dissipation factor and a small voltage coefficient.

### Features

- Epoxy resin encapsulated
- Small size
- Low dissipation factor
- Linear temperature characteristic
- Low DC, AC - voltage coefficient

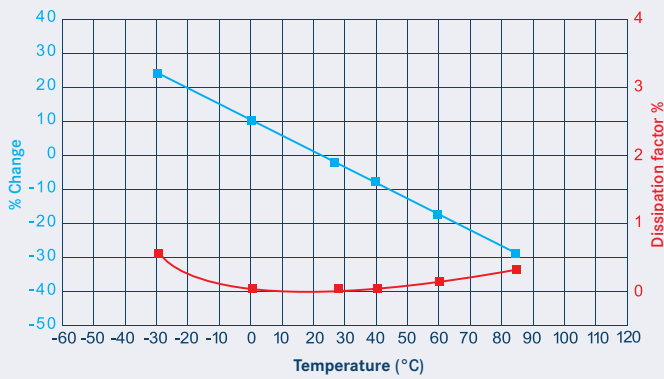
### Applications

- Gas laser
- DC HV power supplies
- Lightning arresters, voltage distribution systems
- Electron microscopes, synchroscopes
- Electrostatic coating machines

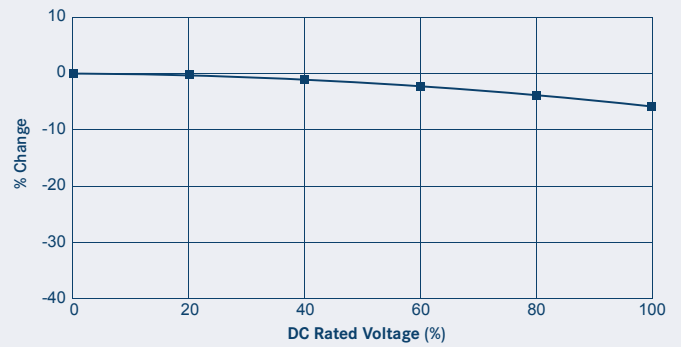
### Performance Parameters

| Part No.   | Capacitance (pF) | Capacitance Tolerance | DC Rated Voltage (kV) | Dimension mm |    |    | Terminal Type  |
|------------|------------------|-----------------------|-----------------------|--------------|----|----|----------------|
|            |                  |                       |                       | D            | L  | H  | Thread & Depth |
| DXU-10-561 | 560              | ±10                   | 10                    | 24           | 20 | 18 | M4x4mm         |
| DXU-10-122 | 1200             | ±10                   | 10                    | 30           | 20 | 18 | M4x4mm         |
| DXU-10-282 | 2800             | ±10                   | 10                    | 40           | 20 | 18 | M4x4mm         |
| DXU-10-502 | 5000             | ±10                   | 10                    | 52           | 20 | 18 | M5x4mm         |
| DXU-10-802 | 8000             | ±10                   | 10                    | 60           | 16 | 14 | M5x4mm         |
| DXU-20-281 | 280              | ±10                   | 20                    | 24           | 26 | 24 | M4x4mm         |
| DXU-20-881 | 880              | ±10                   | 20                    | 30           | 26 | 24 | M4x4mm         |
| DXU-20-142 | 1400             | ±10                   | 20                    | 40           | 26 | 24 | M4x4mm         |
| DXU-20-252 | 2500             | ±10                   | 20                    | 52           | 26 | 24 | M5x4mm         |
| DXU-20-402 | 4000             | ±10                   | 20                    | 60           | 26 | 24 | M5x4mm         |
| DXU-30-591 | 590              | ±10                   | 30                    | 30           | 30 | 28 | M4x4mm         |
| DXU-30-941 | 940              | ±10                   | 30                    | 40           | 30 | 28 | M5x4mm         |
| DXU-30-172 | 1700             | ±10                   | 30                    | 52           | 30 | 28 | M5x4mm         |
| DXU-30-272 | 2700             | ±10                   | 30                    | 60           | 30 | 28 | M5x4mm         |
| DXU-40-441 | 440              | ±10                   | 40                    | 30           | 32 | 30 | M4x4mm         |
| DXU-40-701 | 700              | ±10                   | 40                    | 40           | 32 | 30 | M5x4mm         |
| DXU-40-132 | 1300             | ±10                   | 40                    | 52           | 32 | 30 | M5x4mm         |
| DXU-40-202 | 2000             | ±10                   | 40                    | 60           | 32 | 30 | M5x4mm         |
| DXU-50-401 | 400              | ±10                   | 50                    | 30           | 35 | 33 | M4x4mm         |
| DXU-50-651 | 650              | ±10                   | 50                    | 36           | 35 | 33 | M5x4mm         |
| DXU-50-911 | 910              | ±10                   | 50                    | 40           | 33 | 31 | M5x4mm         |
| DXU-50-112 | 1100             | ±10                   | 50                    | 52           | 35 | 33 | M5x4mm         |
| DXU-50-172 | 1700             | ±10                   | 50                    | 59           | 35 | 33 | M5x4mm         |

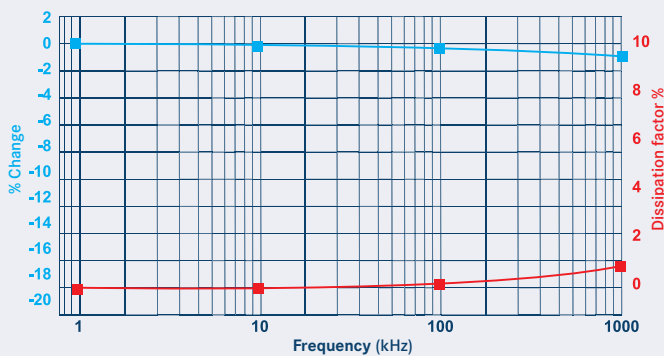
### Temperature Characteristic



### Typical Voltage Coefficient



### Frequency Characteristic



### Specifications & Testing

| 1. Operating temperature range  | Specification                                | Testing method  |
|---------------------------------|--|---|
|                                 | -20 to +85°C                                 | N/A   |
| 2. Capacitance                  | Specification                                | Testing method  |
|                                 | Within the specified tolerance               | The capacitance should be measured at 20°C with 1 ±0.1kHz and AC 1 to 5V (r.m.s)  |
| 3. Temperature characteristics  | Specification                                | Testing method  |
|                                 | Temperature coefficient: - 4700 ±1000 ppm/°C | Temperature range: -25 to +85°C   |
| 4. Dissipation factor           | Specification                                | Testing method  |
|                                 | 0.3% max                                     | The dissipation factor - measured at 20°C with 1 ±0.1kHz and AC 1 to 5V(r.m.s)  |
| 5. Dielectric strength          | Specification                                | Testing method  |
|                                 | Between terminal - No failure                | The capacitor should not be damaged when DC voltage of 150% of the rated voltage is applied between the terminals for 60 ±5sec. in insulating liquid or gas (Charge/discharge currents <50mA) |
| 6. Insulation resistance (I.R.) | Specification                                | Testing method  |
|                                 | 10000MOhm min.                               | The insulation resistance should be measured with DC 1000V within 60 ±5sec. of charging   |