High Voltage Ceramic Capacitors

HD/HE Type – Type N4700 – Maintenance Only

FEATURES

- Disc capacitor, type N4700
- Excellent capacitance vs voltage characteristic
- Low dissipation factor
- Good behavior vs frequency

APPLICATIONS

- AC voltage dividers at industrial frequency
- High frequency coupling and decoupling
- Other special HV applications

TECHNOLOGY

- **HD** range: Molded type with fixtures M5 or M8
- **HE** range: uncoated type without fixtures (silvered ceramic) disc
- Marking: on each part:
  TPC – Reference – Capacitance – Rated voltage
- Delivery mode: bulk in carton box
- Dielectric Type: N4700 class (see typical curves on page 13)



DIELECTRIC CHARACTERISTICS

TPC code	E
Dielectric class (DIN)	N4700
Operating temperature range (ºC)	-30/+85°C
Capacitance change with temperature (%)	+22/-33%
Typical dielectric constant at 0.25 kV/mm	1850
Dielectric strength kV_{DC}/mm	8.0
Dissipation factor (1kHz/1V_{RMS}/20ºC)	20.10^{-4}
Insulation resistance (500V/20ºC)	>10G

ELECTRICAL CHARACTERISTICS

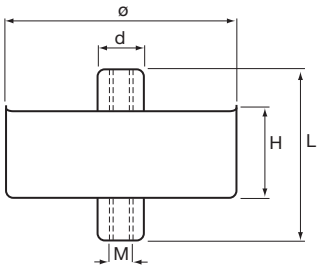
Operating temperature range	-30/+85ºC
Rated voltage (V_{RMS}/50Hz)	15 and 20 kVrms
Test voltage (V_{RMS}/50Hz)	18 and 24 kVrms
Capacitance range	500 to 3000pF
Capacitance tolerance	±20%
Dissipation factor (20ºC - 1kHz - 1V_{RMS})	20.10^{-4}
Self-inductance	L_S ≤40nH
Tolerance	Standard: ±20% On request: ±10%

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HD RANGE: COATED DEVICES

REFERENCES – VOLTAGE AND CAPACITANCE RANGE

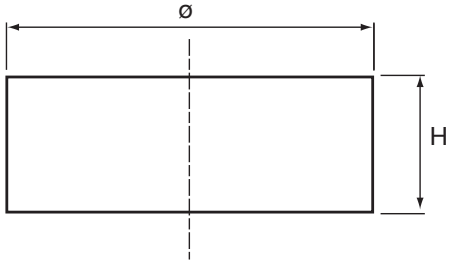


Part Number	Rated Voltage kVdc	Rated Voltage kVrms	Test Voltage kVrms	Capacitance ±20% (pF)*	Dimensions millimeters (inches)					Packaging Unit
					Ø ± 1	L ± 1	H ± 2	d	Fixtures	
HD300X0501M - -	20	15	18	500	26 (1.024)	32 (1.261)	17 (0.670)	8 (0.315)	M5 (0.197)	40
HD400X0102M - -	20	15	18	1000	40 (1.575)	32 (1.261)	17 (0.670)	8 (0.315)	M5 (0.197)	40
HD600X0302M - -	20	15	18	3000	57 (2.245)	40 (1.575)	17 (0.670)	12 (0.473)	M8 (0.315)	10
HD600Y0202M - -	30	20	24	2000	57 (2.245)	42 (1.655)	19 (0.748)	12 (0.473)	M8 (0.315)	10

*tolerance 10% available on request.

HE RANGE: UNCOATED DEVICES

REFERENCES – VOLTAGE AND CAPACITANCE RANGE



Part Number	Rated Voltage kVdc	Rated Votage kVrms	Test Voltage kVrms	Capacitance ±20% (pF)*	Dimensions millimeters (inches)		Packaging Unit
					Ø ± 1	H ± 2	
HE300X0501M- -	20	15	15	500	17 (0.670)	8 (0.314)	20
HE400X0102M- -	20	15	15	1000	26 (1.024)	8 (0.314)	20
HE600X0302M- -	20	15	15	3000	41 (1.614)	8 (0.314)	6
HE600Y0202M- -	30	20	20	2000	38 (1.496)	10 (0.394)	6

*tolerance 10% available on request.

IMPORTANT: HE TYPE

Handling of uncoated devices must be done under strict cleanliness conditions.