

Vishay Cera-Mite

High Voltage Class 1 Ceramic DC Disc Capacitors, Screw Terminal Mounting ,10 kV_{DC} to 40 kV_{DC}



QUICK REFERENCE DATA							
DESCRIPTION	VALUE						
Ceramic Class	1						
Ceramic Dielectric	N4700						
Туре	715C10 KT###	715C15 KT###	715C20 KT###	715C30 KT###	715C40 KT###		
Voltage (V _{DC})	10 000	15 000	20 000	30 000	40 000		
Min. Capacitance (pF)	560	370	280	190	140		
Max. Capacitance (pF)	8000	5300	4000	2700	2000		
Mounting	Screw terminal						

DIELECTRIC STRENGTH

150 % of rated voltage, charging current limited to 50 mA

DISSIPATION FACTOR tan δ

 $\leq 2 \times 10^{-3} (1 \text{ kHz})$

INSULATION RESISTANCE

Min. 200 000 M Ω or 1000 Ω F min. at 25 °C

CORONA LIMIT

< 5 pC at rated AC voltage

OPERATING TEMPERATURE RANGE

- 30 °C to + 85 °C

FEATURES

- Low dissipation factor of 0.2 % at 1 kHz
- N4700 (T3M) Class 1, strontium-based ceramic dielectric
- Negligible piezoelectric/electrostrictive effect
- Low inductance
- High insulation resistance
- Epoxy coating
- · Screw terminal mounting
- · Ceramic singlelayer capacitor

APPLICATIONS

- High voltage power supplies
- CO₂ lasers
- X-ray equipment
- Welding equipment
- Industrial

CAPACITANCE RANGE

140 pF to 8 nF

RATED VOLTAGE (1)

- 10 kV_{DC} (3.5 kV_{RMS})
- 15 kV_{DC} (5.3 kV_{RMS})
- 20 kV_{DC} (7.0 kV_{RMS})
- 30 kV_{DC} (10.6 kV_{RMS})
- 40 kV_{DC} (14 kV_{RMS})

Note

(1) All kV_{RMS} values up to 60 Hz

CERAMIC DIELECTRIC

N4700 (Class 1)

MATERIAL

Capacitor elements made from Class 1 ceramic in a molded epoxy case. Screw terminals: brass, silver plated

MARKING

Type designator, capacitance value, rated DC voltage, ceramic material code, production date code, Cera-Mite logo

POWER DISSIPATION

Limit to 25 °C rise above ambient, measured on case

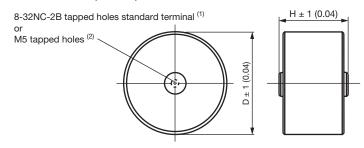
CAPACITANCE TOLERANCES

± 20 %





DIMENSIONS in millimeters (inches)



Notes

- (1) Screw torque limit must be 12 inch pounds. Use #8-32, 3/16" long screw to prevent bottoming
- (2) To order M5 terminals add "M5" suffix to model number, use screw length of 5 mm to prevent bottoming

ORDERING INFORMATION							
715C15KTD33	15 kV _{DC}	3300 pF	± 20 %	N4700			
MODEL	RATED VOLTAGE	CAPACITANCE VALUE	TOLERANCE	CERAMIC			

MODEL	CERAMIC	CAPACITANCE VALUES (pF)	RATED VOLTAGE (kV _{DC})	RATED VOLTAGE (kV _{RMS})	D ± 1 mm (0.04")	H WITH #8-32 TERMINALS ± 1 mm (0.04")	H WITH M5 METRIC TERMINALS ± 1 mm (0.04")
715C10KT###	L		1		I		` '
715C10KTT56		560			21 (0.83)		
715C10KTD10		1000			25 (1.00)		n/a
715C10KTD12	N4700	1200	10	3.5	25 (1.00)	18 (0.70)	
715C10KTD22		2200			38 (1.50)		
715C10KTD28		2800			38 (1.50)		19 (0.76)
715C10KTD50		5000			48 (1.89)		
715C10KTD80		8000			60 (2.36)		
715C15KT###			•	•			•
715C15KTT37		370			21 (0.83)	20 (0.79)	n/a
715C15KTD10		1000			32 (1.25)		n/a
715C15KTD19	N4700	1900	15	5.3	38 (1.50)		22 (0.85)
715C15KTD33	1	3300			48 (1.89)		
715C15KTD53		5300			60 (2.36)		
715C20KT###				•			
715C20KTT28		280	20	7	21 (0.83)	- 23 (0.89)	n/a
715C20KTT56		560			25 (1.00)		n/a
715C20KTD10	N4700	1000			32 (1.25)		24 (0.95)
715C20KTD14	N4700	1400			38 (1.50)		
715C20KTD25		2500			48 (1.89)		
715C20KTD40		4000			60 (2.36)		
715C30KT###							
715C30KTT19		190	30	10.6	21 (0.83)	28 (1.09)	n/a
715C30KTT40	N4700	400			32 (1.25)		n/a
715C30KTT59		590			32 (1.25)		29 (1.15)
715C30KTT94	114700	940			38 (1.50)		
715C30KTD17		1700			48 (1.89)		
715C30KTD27		2700			60 (2.36)		
715C40KT###							
715C40KTT14		140			21 (0.83)		n/a
715C40KTT44	N4700 -	440	40	14	32 (1.25)	31 (1.22)	
715C40KTT70		700			38 (1.50)		
715C40KTD10		1000			44 (1.75)		32 (1.28)
715C40KTD13		1300			48 (1.89)		
715C40KTD20		2000			60 (2.36)		1



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