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Vishay Cera-Mite

High Voltage Class 2 Ceramic DC Disc Capacitors, Screw Terminal Mounting, 15 kV_{DC} to 40 kV_{DC}



QUICK REFERENCE DATA								
DESCRIPTION	VALUE							
Ceramic Class	2							
Ceramic Dielectric	Y5U							
Туре	715C15 DK###	715C20 DK###	715C30 DK###	715C40 DK###				
Voltage (V _{DC})	15 000	20 000	30 000	40 000				
Min. Capacitance (pF)	1500	500	500	300				
Max. Capacitance (pF)	10 000	6800	4700	3300				
Mounting	Screw terminal							

DIELECTRIC STRENGTH

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

DISSIPATION FACTOR tan δ

 $\leq 20 \times 10^{-3} (1 \text{ kHz})$

INSULATION RESISTANCE

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

CORONA LIMIT

< 5 pC at 50 % rated AC voltage

OPERATING TEMPERATURE RANGE

- 30 °C to + 85 °C

FEATURES

- Class 2 ceramic (Y5U)
- 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

100 pF to 10 nF

RATED VOLTAGE (1)

- 15 kV_{DC} (5.3 kV_{RMS})
- 20 kV_{DC} (7.0 kV_{RMS})
- 30 kV_{DC} (10.6 kV_{RMS})
- 40 kV_{DC} (14.0 kV_{RMS})

Note

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

CERAMIC DIELECTRIC

Y5U (Class 2)

MATERIAL

Capacitor elements made from Class 3 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

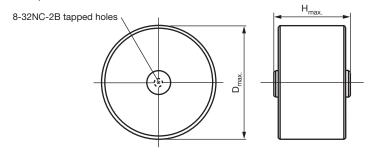
Limit to 25 °C rise above ambient, measured on case

CAPACITANCE TOLERANCES

- 20 % to + 80 %



DIMENSIONS in inches (millimeters)



Notes

- Screw torque limit must be 12 inch pounds. Use #8-32, 3/16" long screw to prevent bottoming
- M5 metric terminals available on request, consult factory

ORDERING INFORMATION								
715C15DKD20	15 kV _{DC}	2000 pF	- 20 % TO + 80 %	Y5U				
MODEL	RATED VOLTAGE	CAPACITANCE VALUE	TOLERANCE	CERAMIC				

SAP PART NUMBER, ELECTRICAL, AND DIMENSIONAL DATA								
MODEL	CERAMIC	CAPACITANCE VALUES (pF)	RATED VOLTAGE (kV _{DC})	RATED VOLTAGE (kV _{RMS})	D _{max.}	H _{max.}		
715C15DK###								
715C15DKD15		1500	15	5.3	26.7 (1.05)	22.9 (0.90)		
715C15DKD20		2000			33.0 (1.30)			
715C15DKD33	Y5U	3300			39.4 (1.55)			
715C15DKD47		4700			33.0 (1.30)			
715C15DKS10		10 000			45.7 (1.80)			
715C20DK###		•		•	•	•		
715C20DKT50		500	20	7.0	22.4 (0.88)	25.4 (1.00)		
715C20DKD10		1000			33.0 (1.30)			
715C20DKD13		1300			33.0 (1.30)			
715C20DKD25	Y5U	2500			39.4 (1.55)			
715C20DKD33		3300			45.7 (1.80)			
715C20DKD47		4700			54.1 (2.13)			
715C20DKD68		6800			61.5 (2.42)			
715C30DK###								
715C30DKT50	Y5U	500	30	10.6	26.7 (1.05)	34.5 (1.36)		
715C30DKD10		1000			33.0 (1.30)	30.0 (1.18)		
715C30DKD25		2500			45.7 (1.80)			
715C30DKD33		3300			54.1 (2.13)			
715C30DKD47		4700			61.5 (2.42)			
715C40DK###								
715C40DKT30		300	40	14.0	22.4 (0.88)	34.5 (1.36)		
715C40DKT50		500			26.7 (1.05)			
715C40DKT78	Y5U	780			33.0 (1.30)			
715C40DKD10		1000			39.4 (1.55)			
715C40DKD16		1600			45.7 (1.80)			
715C40DKD25		2500			54.1 (2.13)			
715C40DKD33		3300			58.4 (2.30)			



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Revision: 02-Oct-12 Document Number: 91000