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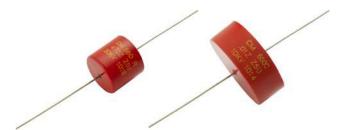




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Vishay Cera-Mite

High Voltage Ceramic DC Disc Capacitors with Axial Leads, 10 kV_{DC} to 30 kV_{DC}



FEATURES

RoHS COMPLIANT

- Class 1 and class 2 ceramic
- · High insulation resistance
- Epoxy encapsulated
- Wide capacitance range
- Ceramic singlelayer capacitor
- Material categorization: For definitions of compliance please see <u>www.vishav.com/doc?99912</u>

QUICK REFERENCE DATA												
DESCRIPTION	VALUE											
Ceramic Class		1 2 2										
Ceramic Dielectric	N4700				X7R				Z5U			
Voltage (V _{DC})	10 000	15 000	20 000	30 000	10 000	15 000	20 000	30 000	10 000	15 000	20 000	30 000
Min. Capacitance (pF)	470	390	220	180	180	100	100	100	1500	1000	680	470
Max. Capacitance (pF)	2000	1500	1000	680	4700	3900	2700	2000	10 000	6800	5000	3300
Mounting	Axial											

MARKING

Capacitance value and tolerance, rated DC voltage, T/C code, production date code, CM mark.

MATERIAL

Capacitor elements made from class 1 or class 2 ceramic in a molded case, high temperature epoxy construction. Leads: Tinned copper clad steel.

DIELECTRIC STRENGTH

150 % of rated voltage (in dielectric fluid), charging current limited to 50 mA.

DISSIPATION FACTOR tan δ

N4700: \leq 2 x 10⁻³ (1 kHz) X7R, Z5U: \leq 20 x 10⁻³ (1 kHz)

INSULATION RESISTANCE

Min. 200 000 M Ω , at 180 V_{DC} or 1000 Ω F

OPERATING TEMPERATURE RANGE

- 30 °C to + 85 °C

RATED VOLTAGE (1)

Standard version

- 660C10A### 10 kV_{DC} (3.5 kV_{RMS})
- 660C15A### 15 kV_{DC} (5.6 kV_{RMS})
- 660C20A### 20 kV_{DC} (7.0 kV_{BMS})
- 660C30A### 30 kV_{DC} (10.6 kV_{RMS})

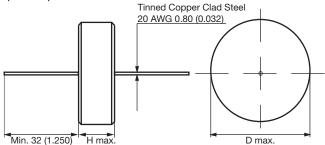
RoHS compliant version

- 660R10A### 10 kV_{DC} (3.5 kV_{RMS})
- 660R15A### 15 kV_{DC} (5.6 kV_{RMS})
- 660R20A### 20 kV_{DC} (7.0 kV_{RMS})
- 660R30A### 30 kV_{DC} (10.6 kV_{RMS})

Note

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

DIMENSIONS in millimeters (inches)



ORDERING INFORMATION										
660C20AZT68	20 kV _{DC}	680 pF	± 20 %	N4700						
MODEL	RATED VOLTAGE	CAPACITANCE VALUE	TOLERANCE	CERAMIC						



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MODEL NUMBER 4 TH DIGIT: C = STANDARD R = ROHS COMPLIANT	CERAMIC	CAP. VALUE (pF)	TOLERANCE (%)	RATED VOLTAGE (kV _{DC})	RATED VOLTAGE (kV _{RMS})	D MAX. (mm)	D MAX. (INCHES)	H MAX. (mm)	H MAX. (INCHES)
660#10AZ###	1								
660#10AZT47		470				21	0.83		
660#10AZD10	N4700	1000	± 20 %	10	3.5	30	1.18	13	0.50
660#10AZD20	1111100	2000	± 20 70	10		37	1.45		
660#10AC###	1					<u> </u>			
660#10ACT18		180							
660#10ACT22	1	220	± 20 %						
660#10ACT33	1	330							
660#10ACT47	1	470				21	0.83	13	0.50
660#10ACT68	1	680							
660#10ACD10	X7R	1000		10	3.5	30	1.18		
660#10ACD15	1	1500						15	0.60
660#10ACD13	1	2200						14	0.55
660#10ACD33	1	3300						13	0.50
660#10ACD47	-	4700				37			
660#10AE###		4700				31	1.45		
660#10AED15	1	1500	1						1
	- Z5U		+ 80 %/	10	3.5	21	0.83	13	0.50
660#10AED22		2200							
660#10AED33		3300				30	1.18		0.50
660#10AED47		4700							
660#10AED68		6800				37	1.45	44	0.45
660#10AES10		10 000						11	0.45
660#15AZ###	 	000	T			01	0.00		l
660#15AZT39	N4700	390	± 20 %	15	5.3	21	0.83	13	0.50
660#15AZT82	N4700	820				30	1.18 1.45	4.4	
660#15AZD15		1500				37		11	0.45
660#15AC###	1 1	100	1				1		T T
660#15ACT10		100	± 20 %	15	5.3	21	0.83 1.18 1.45	13	0.50
660#15ACT22	-	220							
660#15ACT33		330						15	0.60
660#15ACT47		470							
660#15ACT68	X7R	680						13	0.50
660#15ACD10	_	1000						15	0.60
660#15ACD15		1500	4			30		17	0.65
660#15ACD22]	2200	4					15	
660#15ACD33]	3300				37			0.60
660#15ACD39		3900				-·			
660#15AE###	, 						T		
660#15AED10]	1000				21	0.83		
660#15AED15]	1500	_				5.55		
660#15AED22	Z5U	2200	+ 80 %/	15	5.3			13	0.50
660#15AED33]	3300	- 20 %		0.0	30	1.18		
660#15AED47	<u> </u>	4700							
660#15AED68		6800				37	1.45	13.5	0.53
660#20AZ###									
660#20AZT22		220				21	0.83		
660#20AZT68	N4700	680	± 20 %	20	7	30	1.18	15	0.60
660#20AZD10	1	1000	7			37	1.45		



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MODEL NUMBER		CAP.		RATED	RATED				
4 TH DIGIT: C = STANDARD R = ROHS COMPLIANT	CERAMIC	VALUE (pF)	TOLERANCE (%)	VOLTAGE (kV _{DC})	VOLTAGE (kV _{RMS})	D MAX. (mm)	D MAX. (INCHES)	H MAX. (mm)	H MAX. (INCHES)
660#20AC###	JI		•			I.			
660#20ACT10		100	± 20 %	20	7	21	0.83	15	0.60
660#20ACT22		220							
660#20ACT33	-	330							
660#20ACT47		470						17	0.65
660#20ACT68	VZD	680				30	1.18	15	0.00
660#20ACD10	- X7R	1000						15	0.60
660#20ACD15		1500						20	0.80
660#20ACD22		2200				37	1.45	18	0.70
660#20ACD25		2500						19	0.75
660#20ACD27		2700						20	0.80
660#20AE###			1			I.			
660#20AET68		680						15	0.60
660#20AED10	1	1000	1	20	7	21	0.83	17	0.66
660#20AED15	Z5U	1500	+ 80 %/ - 20 %						
660#20AED22		2200					1.10	15	0.60
660#20AED33		3300				30	1.18		
660#20AED47		4700				37	1.45	19	0.75
660#20AED50		5000						14	0.55
660#30AZ###						I			
660#30AZT18	N4700	180	± 20 %	30	10.6	21	0.83	20	
660#30AZT47		470				30	1.18		0.80
660#30AZT68		680				37	1.45		
660#30AC###	1					I	1		1
660#30ACT10		100							
660#30ACT22		220	± 20 %	30	10.6	21	0.83	20	0.80
660#30ACT33		330							
660#30ACT47	1	470						19	0.75
660#30ACT68	X7R	680					1.18		0.80
660#30ACD10	1	1000				30			
660#30ACD15		1500						20	
660#30ACD20		2000				37	1.45		
660#30AE###	1		1			<u>l</u>	<u> </u>		1
660#30AET47		470			10.6	21	0.83	20	0.80
660#30AET68	†	680	1	30				19	0.75
660#30AET82	1	820	1						
660#30AED10	Z5U	1000	+ 80 %/ - 20 %			30	1.18	20	0.80
660#30AED12		1200							
660#30AED15		1500							
660#30AED18		1800				37	1.45		0.75
660#30AED20		2000						19	
660#30AED22		2200	1						5.70
660#30AED25		2500	-						
660#30AED30		3000							
660#30AED33	1	3300	4					20	0.80



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