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Vishay Cera-Mite

AC Line Rated Ceramic Disc Capacitors Class X2, 400 V_{AC}



QUICK REFERENCE DATA				
DESCRIPTION	VALUE			
Ceramic Class	2			
Ceramic Dielectric	Y5V			
Voltage (V _{AC})	400			
Min. Capacitance (pF)	9000			
Max. Capacitance (pF)	100 000			
Mounting	Radial			

INSULATION RESISTANCE

Min. 1000 ΩF

TOLERANCE ON CAPACITANCE

± 20 %

DISSIPATION FACTOR

2.0 % max. at 1 kHz; 1 V

CERAMIC DIELECTRIC

Y5V

CATEGORY TEMPERATURE RANGE

-25 °C to +125 °C

CLIMATIC CATEGORY ACC. TO EN 60068-1

25 / 125 / 21

OPERATING TEMPERATURE RANGE

-30 °C to +125 °C

FEATURES

• Complying with IEC 60384-14 3rd edition



- High reliability
- Radial leads
- · Singlelayer AC disc safety capacitors

RoHS

Material categorization: for definitions of compliance please see <u>www.vishay.com/doc?99912</u>

APPLICATIONS

- X2 according to IEC 60384-14.3
- Across-the-line
- RFI filtering

DESIGN

The capacitors consist of a ceramic disc of which both sides are silver-plated. Connection leads are made of tinned copper having a diameter of 0.025" (0.64 mm). The capacitors may be supplied with radial kinked or straight leads having a lead spacing of 0.375" (9.5 mm) or 0.250" (6.4 mm). The standard tolerance is \pm 20 %. Coating is made of flame retardant epoxy resin in accordance with "UL 94 V-0."

CAPACITANCE RANGE

9 nF to 0.1 µF

RATED VOLTAGE

IEC 60384-14.3: X2: 400 V_{AC}, 50 Hz

DIELECTRIC STRENGTH BETWEEN LEADS

Component test:

1250 V_{AC}, 50 Hz, 2 s

As repeated test admissible only once with:

1080 V_{AC}, 50 Hz, 2 s

Random sampling test (destructive test):

1250 V_{AC}, 50 Hz, 60 s

DIELECTRIC STRENGTH OF BODY INSULATION

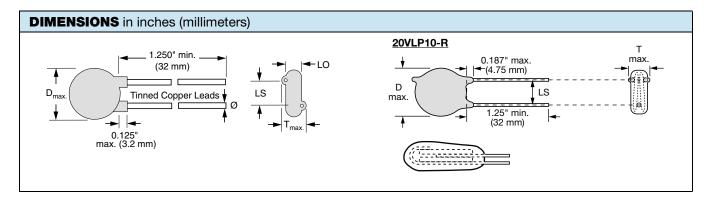
2300 V_{AC}, 50 Hz, 60 s (destructive test)

ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishav.com/doc?91000



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ORDERING INFORMATION, CERAMIC X2 CAPACITORS 20VL								
C (μF)	TOL. (%)	D _{max.} DIAMETER INCH (mm)	T _{max.} THICKNESS INCH (mm)	AWG	IRE SIZE	LS LEAD SPACE INCH (mm) ± 1 mm	LO LEAD OFFSET INCH (mm) ± 0.5 mm	ORDERING CODE
0.009	± 20	0.530 (13.5)	0.150 (3.8)				0.055 (1.4)	20VLD90-R
0.010	± 20	0.620 (15.7)	0.150 (3.8)	22	0.025 (0.64)	0.375 (9.5)	0.063 (1.6)	20VLS10-R
0.020	± 20	0.720 (18.3)	0.150 (3.8)] 22	0.023 (0.04)	0.375 (9.5)	0.055 (1.4)	20VLS20-R
0.100	± 20	0.950 (24.1)	0.230 (5.8)				0.067 (1.7)	20VLP10-R

Notes

- Alternate lead spacings of 7.5 mm and 10 mm are available bulk or tape and reel on request.
- Minimum lead clearance according to IEC 60384-14: 0.118" (3 mm)

TAPE AND REEL OPTIONS

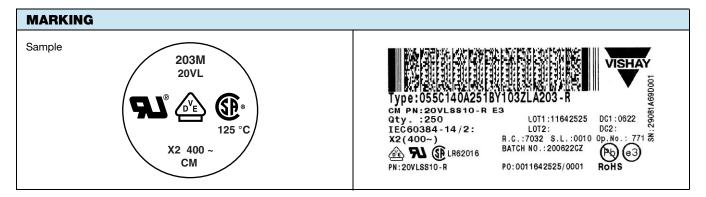
Part number codes and specifications for tape and reel packaging are found in the general information document - find web-link below.

APPROVALS						
IEC 60384-14.3 - Safety tests This approval together with CB test certificate substitutes all national approvals.						
CB Certificate				\wedge		
X2-capacitor: CB test certificate:	DE 1 - 19450	9 nF to 0.1 μF	400 V _{AC}	DVE		
VDE				^		
X2-capacitor: VDE marks approval:	40003982	9 nF to 0.1 μF	$400 V_{AC}$	$\angle \vee $		
DIN EN 60384-14 VDE 0565-1-1:2006-04 - Safety tests				DIF		
Underwriters Laboratories Inc.						
X2-capacitor: UL test certificate:	E99264	9 nF to 0.1 μF	$400 V_{AC}$	□ I®		
UL 60384-14, CSA E60384-1:03, CSA E60384-14:09				c TL us		



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RELATED DOCUMENTS		
General Information	www.vishay.com/doc?23140	
CB Test Certificate	www.vishay.com/doc?22247	
VDE Marks Approval	www.vishay.com/doc?22246	
UL Test Certificate	www.vishay.com/doc?22245	



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