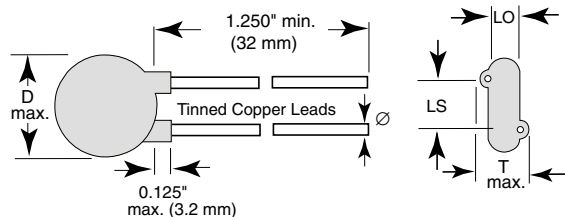


AC Line Rated Disc Capacitors Class X2, 400 VAC



LO' = 0.132" (3.4 mm) typ.

INSULATION RESISTANCE

Min. 1000 Ω F

TOLERANCE ON CAPACITANCE

$\pm 20\%$, - 20 % to + 80 %

DISSIPATION FACTOR

2.0 % max. at 1 kHz; 1 V

CERAMIC DIELECTRIC

Y5V, Z5U (Class 2)

CATEGORY TEMPERATURE RANGE

- 25 °C to + 125 °C

CLIMATIC CATEGORY ACC. TO EN60068-1

25/125/21

OPERATING TEMPERATURE RANGE

- 30 °C to + 125 °C

FEATURES

- Worldwide safety agency recognition
Underwriters laboratories UL 1283
Canadian standards association - CSA 22.2
European EN132400 to IEC 60384-14 second edition
- Complete range of capacitance values
- Radial leads
- Compliant to RoHS directive 2002/95/EC



RoHS
COMPLIANT

APPLICATIONS

- Required in AC Power Supply and Filter Applications
- Specific Industry Requirements

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 tolerances are $\pm 20\%$ or + 80 % - 20 %. Coating is made of flame retardant epoxy resin in accordance with "UL 94 V-0."

CAPACITANCE RANGE

9 nF to 0.1 μ F

RATED VOLTAGE

IEC 60384-14.12: (X2): 400 V_{AC}, 50 Hz

UL 1238: 250 V_{AC}, 60 Hz

CSA 22.2 No.8: 250 V_{AC}, 60 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)

20VL Series

Vishay Cera-Mite

AC Line Rated Disc Capacitors
Class X2, 400 VAC



ORDERING INFORMATION, CERAMIC X2 CAPACITORS 20VL

C (pF)	TOL. (%)	D DIAMETER INCH (mm)	T THICKNESS INCH (mm)	WIRE SIZE		LS LEAD SPACE INCH (mm)	ORDERING CODE
				AWG	INCH (mm)		
Y5V							
0.009 μF	± 20 %	0.530 (13.5)	0.150 (3.8)	22	0.025 (0.64)	0.375 (9.5)	20VLD90-R
0.010 μF	± 20 %	0.620 (15.7)	0.150 (3.8)				20VLS10-R
0.020 μF	+ 80 % - 20 %	0.720 (18.3)	0.150 (3.8)				20VLS20-R
0.100 μF	± 20 %	0.940 (23.9)	0.240 (6.1)				20VLP10-R ⁽¹⁾
Z5U							
0.010 μF	+ 80 % - 20 %	0.530 (13.5)	0.160 (4.1)	22	0.025 (0.64)	0.250 (6.4)	20VLSS10-R

Notes

- ⁽¹⁾ 20VLP10-R not available with CSA 22.2 no. 8 recognition
- Alternate lead spacings of 7.5 mm and 10 mm are available bulk or tape and reel on request.
- European required minimum lead clearance (prevents use of inside crimp) 0.118" (3 mm)

TAPE AND REEL OPTIONS

- To specify tape and reel, add two letter suffix to the ordering code (Details of the packaging code see general section of the catalog.)

APPROVALS

IEC 60384 - 14/2nd Issue (1993) incl. Am.1 (1995) - Safety Tests
EN132400 (1994) - Safety Tests

That approval together with CB Test Certificate substitutes the national approval of the following nations:

Belgium	France	Italy	Austria	China	Japan	Spain
Denmark	Greece	Luxembourg	Portugal	Singapore	Poland	United Kingdom
Germany	Ireland	Netherlands	Sweden	Slovenia	Hungaria	Czech Republic
Finland	Iceland	Norway	Switzerland	Korea	Israel	

X2 Capacitor: CB-Test Certificate: DE 1-19450 9000 pF to 0.1 μ F 400 V_{AC}



UNDERWRITERS LABORATORIES INC.

UL 1238 EMI filters
Agency File/License E128046 V1S1 9000 pF to 0.1 μ F 250 V_{AC}



CANADIAN STANDARDS ASSOCIATION

CSA C22.8 EMI filters
Agency File/License LR 62016-3 9000 pF to 0.020 μ F 250 V_{AC}

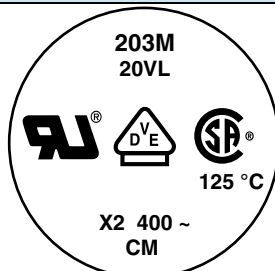


Note

- IEC 60384-14 Subclass X Capacitors:
- A capacitor or a type suitable for use in situations where failure of the capacitor would not lead to danger of electric shock.
- Class X capacitors are divided into sub-classes according to the peak impulse test voltage superimposed on the main voltage.

MARKING

Sample



Type: 055C140A251BY103ZLA203-R

CM PN: 20VLS10-R E3

Qty.: 250

IEC 60384-14 / 2:

X2 (400~)

LR62016

PN: 20VLS10-R

LOT1: 11642525

LOT2:

R.C.: 7032 S.L.: 0010

BATCH NO.: 200622CZ

PO: 0011642525/0001

DC1: 0622

DC2:

Op.No.: 771

SN: 29081A69D001

RoHS



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