



# CERAMIC DISC CAPACITORS

## VY1...Y5V Series

**AC Line Rated Disc Capacitors Class X1, 760 V<sub>AC</sub>:  
Class Y1, 500 V<sub>AC</sub> Mini Sized and VY1 Safety Capacitors**



### KEY BENEFITS

- Mini sized
- Complies with IEC 60384-14, 4<sup>th</sup> edition
- ENEC-VDE, UL60384-14, and CSA approved
- High reliability
- Higher pulse load stability
- Vertical (inline) kink or straight leads

### APPLICATIONS

- Across the line
- Line bypass
- Antenna coupling

### RESOURCES

- Datasheet: VY1 Series - <http://www.vishay.com/doc?28537>
- For technical questions contact [CDC@vishay.com](mailto:CDC@vishay.com)
- Material categorization: For definitions please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



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QUICK REFERENCE DATA	
DESCRIPTION	VALUE
Ceramic Class	2
Ceramic Dielectric	Y5V
Voltage (V <sub>AC</sub> )	500   760
Min. Capacitance (pF)	1000
Max. Capacitance (pF)	4700
Mounting	Radial

#### OPERATING TEMPERATURE RANGE

-40 °C to +125 °C

#### TEMPERATURE CHARACTERISTICS

Class 2: Y5S, Y5U

#### Climatic Category

40/125/21 according to EN 60058-1

#### COATING

According to UL 94 V-0

Epoxy resin, isolating, flame retardant

#### APPROVALS

ENEC - VDE DE 1-30691

UL 60384-14 file E183844

CSA 22.2

#### PACKAGING

Bulk, tape and reel, taped ammpack

#### DESIGN

The capacitor consists of a ceramic disc which is silver plated on both sides. Connection leads are made of tinned copper clad steel having a diameter of 0.6 mm.

The capacitors may be supplied with vertical (inline) kinked leads having a lead spacing of 10.0 mm, or 12.5 mm. Encapsulation is made of flame retardant epoxy resin in accordance with UL 94 V-0.

#### CAPACITANCE RANGE

10 nF to 4700 nF

#### RATED VOLTAGE U<sub>R</sub>

IEC 60384-14 and UL60384-14

(X1): 760 V<sub>AC</sub>, 50 Hz

(Y1): 500 V<sub>AC</sub>, 50 Hz

#### TEST VOLTAGE

Component test (100 %):

4000 V<sub>AC</sub>, 50 Hz, 2 s

Random sampling test (destructive test):

4000 V<sub>AC</sub>, 50 Hz, 60 s

Voltage proof of coat (destructive test):

4000 V<sub>AC</sub>, 50 Hz, 60 s

#### INSULATION RESISTANCE

10 000 MΩ minimum

#### TOLERANCE OF CAPACITANCE

± 20 % (code M)

#### DISSIPATION FACTOR

2.5 % maximum