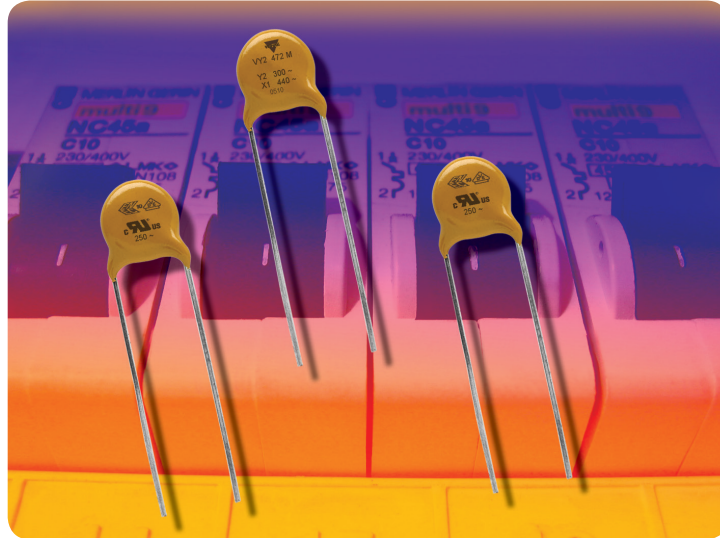


CERAMIC DISC CAPACITORS

VY2 Series

AC Line Rated Disc Capacitors Class X1, 440 V_{AC}, Class Y2, 300 V_{AC}



FEATURES

- Capacitance range: 10 pF to 10 nF
- Rated voltage IEC 60384-14.3:
 - X1: 440 V_{AC}, 50 Hz
 - Y2: 300 V_{AC}, 50 Hz
- Components 100 % voltage-tested at 2600 V_{AC}, 50 Hz, 2 s
- Operating temperature: - 40 °C to + 125 °C
- Comply with IEC 60384-14,3rd edition
- ENEC-VDE, UL60384-14, and CSA approved
- High reliability
- Compliant to RoHS directive 2011/65/EU
- Halogen-free available
- Small size
- Vertical (inline) kink or straight leads

APPLICATIONS

- Across-the-line
- Line by-pass
- Antenna coupling

RESOURCES

- Datasheet: VY2 Series - <http://www.vishay.com/doc?28535>
- For technical questions contact CDC@vishay.com

One of the World's Largest Manufacturers of
Discrete Semiconductors and Passive Components



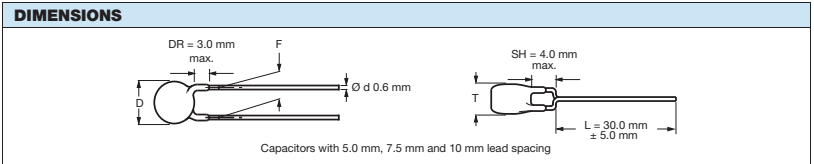
CERAMIC DISC CAPACITORS

VY2 Series

AC Line Rated Disc Capacitors Class X1, 440 V_{AC}, Class Y2, 300 V_{AC}



RoHS
COMPLIANT
HALOGEN
FREE
Available



FEATURES

- Complying with IEC 60384-14, 3rd edition
- High reliability
- Vertical (inline) kinked or straight leads
- Material categorization:
For definitions of compliance please see www.vishay.com/doc?99912

APPLICATIONS

- Across-the-line
- Line by-pass
- Antenna coupling

DESIGN

The capacitors consist of a ceramic disc both sides of which are silver-plated. Connection leads are made of tinned copper having a diameter of 0.6 mm.

The capacitors may be supplied with vertical (inline) kinked leads having a lead spacing of 5.0 mm, 7.5 mm, or 10.0 mm. Encapsulation is made of flammable resistant epoxy resin in accordance with "UL 94 V-0"

CAPACITANCE RANGE

10 pF to 0.01 µF

RATED VOLTAGE U_R

IEC 60384-14 and UL60384-14:

(X1): 440 V_{AC}, 50 Hz

(Y2): 300 V_{AC}, 50 Hz

TEST VOLTAGE

Component test (100 %)

2600 V_{AC}, 50 Hz, 2 s

(2600 V_{AC} for LS 7.5 mm and 10 mm)

(2200 V_{AC} for LS 5.0 mm)

Random sampling test (destructive test)

2600 V_{AC}, 50 Hz, 60 s

Voltage proof of coating (destructive test)

2600 V_{AC}, 50 Hz, 60 s

INSULATION RESISTANCE

10 000 MΩ minimum

TOLERANCE OF CAPACITANCE

± 20 % (code M); ± 10 % (code K)

DISSIPATION FACTOR

2.5 % maximum

The capacitors meet the essential requirements of "EIA 198". Unless stated otherwise all electrical values apply at an ambient temperature of 25 °C ± 3 °C, at normal atmospheric conditions

OPERATING TEMPERATURE RANGE

- 40 °C to + 125 °C

TEMPERATURE CHARACTERISTICS

See Ordering Information Tables

CLIMATIC CATEGORY

40/125/21 according to EN 60068-1

COATING

According to UL 94 V-0

Epoxy resin, isolating, flame retardant

APPROVALS

ENEC - VDE DE 1-30691

UL60384-14 file E183844

CSA 22.2

PACKAGING

Bulk; tape and reel; taped ammpack

ORDERING INFORMATION

C (pF)	TOL. (%)	TEMP. COEFFICIENT	BODY DIAMETER D _{max} (mm)	BODY THICKNESS T _{max} (mm)	LEAD SPACING F (mm)	COATING EXTENSION DR _{max} (2) (mm)	CLEAR TEXT CODE		
							15 TH DIGIT: T = REEL; U = AMMO; 3 = BULK (1)		
							RoHS COMPLIANT	RoHS AND HALOGEN-FREE	
VY2 for leadspacing 5.0 mm							2200 V_{AC}, 50 Hz, 2 s		
10		U2J (N750)	7.5	5.0	5.0	3.0	YY2100K29U2JS6*V5	YY2100K29U2JG6*V5	
15							YY2150K29U2JS6*V5	YY2150K29U2JG6*V5	
22							YY2220K29U2JS6*V5	YY2220K29U2JG6*V5	
33							YY2330K29U2JS6*V5	YY2330K29U2JG6*V5	
47							YY2470K29U2JS6*V5	YY2470K29U2JG6*V5	
68							YY2680K29Y5SS6*V5	YY2680K29Y5SG6*V5	
100	± 10	Y5S (2C3)	7.5	5.0	5.0	3.0	YY2101K29Y5SS6*V5	YY2101K29Y5SG6*V5	
150								YY2151K29Y5SS6*V5	YY2151K29Y5SG6*V5
220								YY2221K29Y5SS6*V5	YY2221K29Y5SG6*V5
330								YY2331K29Y5SS6*V5	YY2331K29Y5SG6*V5
470								YY2471K29Y5SS6*V5	YY2471K29Y5SG6*V5
680								YY2681M29Y5US6*V5	YY2681M29Y5UG6*V5
1000	± 20	Y5U (2E3)	8.0	5.0	5.0	3.0	YY2102M29Y5US6*V5	YY2102M29Y5UG6*V5	
1500								YY2152M31Y5US6*V5	YY2152M31Y5UG6*V5
2200								YY2222M35Y5US6*V5	YY2222M35Y5UG6*V5
3300								YY2332M41Y5US6*V5	YY2332M41Y5UG6*V5
4700								YY2472M49Y5US6*V5	YY2472M49Y5UG6*V5
6800								YY2682M59Y5US6*V5	YY2682M59Y5UG6*V5
3900			YY2392M43Y5US6*V5	YY2392M43Y5UG6*V5					

ORDERING INFORMATION

C (pF)	TOL. (%)	TEMP. COEFFICIENT	BODY DIAMETER D _{max} (mm)	BODY THICKNESS T _{max} (mm)	LEAD SPACING F (mm)	COATING EXTENSION DR _{max} (2) (mm)	CLEAR TEXT CODE		
							15 TH DIGIT: T = REEL; U = AMMO; 3 = BULK (1)		
							RoHS COMPLIANT	RoHS AND HALOGEN-FREE	
VY2 for leadspacing 7.5 mm							2600 V_{AC}, 50 Hz, 2 s		
10		U2J (N750)	7.5	5.0	7.5	3.0	YY2100K29U2JS6*V7	YY2100K29U2JG6*V7	
15							YY2150K29U2JS6*V7	YY2150K29U2JG6*V7	
22							YY2220K29U2JS6*V7	YY2220K29U2JG6*V7	
33							YY2330K29U2JS6*V7	YY2330K29U2JG6*V7	
47							YY2470K29U2JS6*V7	YY2470K29U2JG6*V7	
68							YY2680K29Y5SS6*V7	YY2680K29Y5SG6*V7	
100	± 10	Y5S (2C3)	7.5	5.0	7.5	3.0	YY2101K29Y5SS6*V7	YY2101K29Y5SG6*V7	
150								YY2151K29Y5SS6*V7	YY2151K29Y5SG6*V7
220								YY2221K29Y5SS6*V7	YY2221K29Y5SG6*V7
330								YY2331K29Y5SS6*V7	YY2331K29Y5SG6*V7
470								YY2471K29Y5SS6*V7	YY2471K29Y5SG6*V7
680								YY2681M29Y5US6*V7	YY2681M29Y5UG6*V7
1000	± 20	Y5U (2E3)	8.0	5.0	7.5	3.0	YY2102M29Y5US6*V7	YY2102M29Y5UG6*V7	
1500								YY2152M31Y5US6*V7	YY2152M31Y5UG6*V7
2200								YY2222M35Y5US6*V7	YY2222M35Y5UG6*V7
3300								YY2332M41Y5US6*V7	YY2332M41Y5UG6*V7
4700								YY2472M49Y5US6*V7	YY2472M49Y5UG6*V7
6800								YY2682M59Y5US6*V7	YY2682M59Y5UG6*V7
0.01 µF			16.0				YY2103M63Y5US6*V7	YY2103M63Y5UG6*V7	

QUICK REFERENCE DATA

DESCRIPTION	CLASS X1 (U2J)	CLASS X1 (Y5S)	CLASS X1 (Y5U)	CLASS Y2 (U2J)	CLASS Y2 (Y5S)	CLASS Y2 (Y5U)
Voltage (V _{AC})	440			300		
Min. Capacitance (pF)	10	68	680	10	68	680
Max. Capacitance (pF)	47	680	10 000	47	680	10 000
Mounting	Through hole					

Capacitors - High Reliability

Revision 09-Mar-12