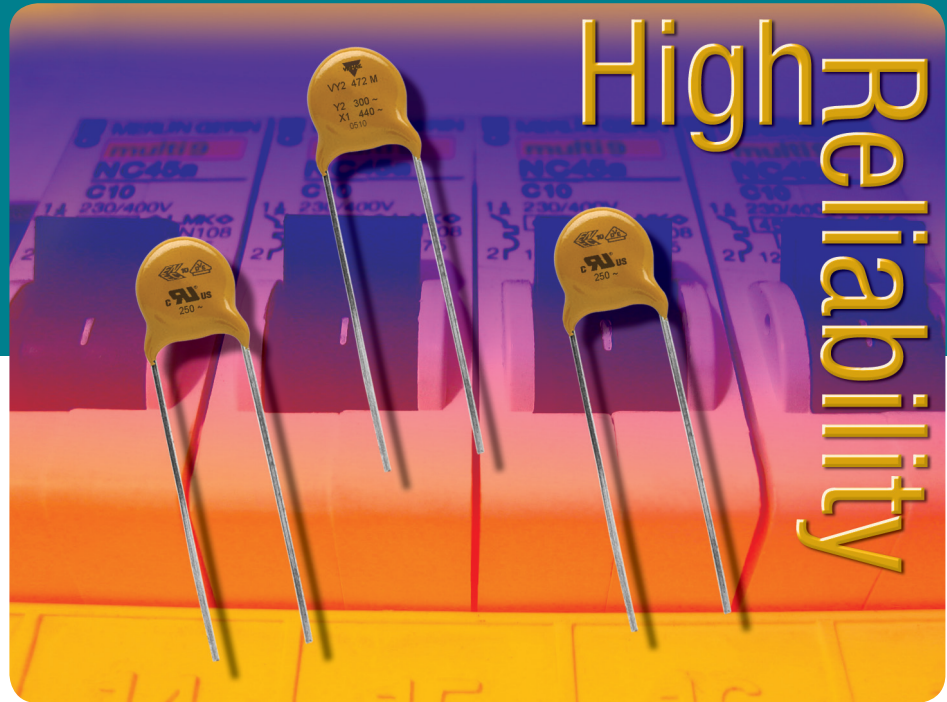




EMI/RFI CAPACITORS

VY2 Series 300 V_{AC}



Ceramic Disc Capacitors

KEY BENEFITS

- Comply with IEC 60384-14,3rd edition
- ENEC-VDE, UL1414, and CSA approved
- High reliability
- Compliant to RoHS directive 2002/95/EC and in accordance to WEEE 2002/96/EC
- Halogen-free available
- Small size
- Vertical (inline) kink or straight leads

KEY SPECIFICATIONS

- Capacitance range: 10 pF to 10 nF
- Rated voltage IEC 60384-14.2:
 - 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

APPLICATIONS

- Across the line
- Line bypass
- Antenna coupling



Ceramic Disc Capacitors Safety Standard Approved Disc AC Capacitors

FEATURES

- Complying with IEC 60384-14, 3rd edition
- High reliability
- Vertical (in-line) kinked or straight leads
- Compliant to RoHS directive 2002/95/EC and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition

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 (in-line) 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 60384-14-2:

(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)

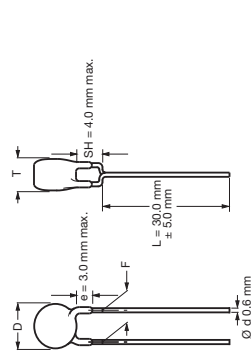
DISSIPATION FACTOR

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



RoHS COMPLIANT HALOGEN FREE AVAILABLE



Capacitors with 5.0 mm, 7.5 mm and 10 mm lead spacing

QUICK REFERENCE DATA						
DESCRIPTION	CLASS X1 (U2J)	CLASS Y5 (V5U)	CLASS X1 (U2J)	CLASS Y2 (V5U)	CLASS Y2 (V5U)	CLASS Y2 (V5U)
Voltage (V _{AC})	440	440	300	300	300	300
Min. Capacitance (pF)	10	68	680	10	68	680
Max. Capacitance (pF)	47	680	10 000	47	680	10 000
Mounting	Through hole					

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

UL 1414 file E183844

CSA 22.2

PACKAGING

Bulk; tape and reel; taped ammpack

ORDERING INFORMATION							CLEAR TEXT CODE			
C	TOL (%)	TEMP COEFFICIENT (%)	BODY DIAMETER D _h (mm)	BODY THICKNESS T _{max} (mm)	LEAD SPACING F (mm)	COATING EXTENSION E _{max} (mm)	1 st DIGIT: T = REEL; U = AMMO; 3 = BULK (1)	RHs COMPLIANT	2000 V _{AC} , 50 Hz, 2 s	2600 V _{AC} , 50 Hz, 2 s
VY2 for leadspacing 5.0 mm										
15		U2J (N750)							VY2100K29U2J5E6V5	VY2100K29U2J5E6V7
22									VY2150K29U2J5E6V5	VY2150K29U2J5E6V7
33									VY2220K29U2J5E6V5	VY2220K29U2J5E6V7
47									VY2330K29U2J5E6V5	VY2330K29U2J5E6V7
68	± 10		7.5						VY2470K29U2J5E6V5	VY2470K29U2J5E6V7
100		Y5S (2C3)							VY2680K29V5S5E6V5	VY2680K29V5S5E6V7
150				5.0	5.0	3.0			VY2101K29V5S5E6V5	VY2101K29V5S5E6V7
220									VY2221K29V5S5E6V5	VY2221K29V5S5E6V7
330									VY2331K29V5S5E6V5	VY2331K29V5S5E6V7
470									VY2471K29V5S5E6V5	VY2471K29V5S5E6V7
680									VY2681M29V5U5E6V5	VY2681M29V5U5E6V7
1000			8.0						VY2102M29V5U5E6V5	VY2102M29V5U5E6V7
1500		Y5U (2E3)							VY2152M31V5U5E6V5	VY2152M31V5U5E6V7
2200	± 20		9.0						VY2222M35V5U5E6V5	VY2222M35V5U5E6V7
3300			11.0						VY2332M41V5U5E6V5	VY2332M41V5U5E6V7
4700			12.5						VY2392M43V5U5E6V5	VY2392M43V5U5E6V7
6800			14.5						VY2472M49V5U5E6V5	VY2472M49V5U5E6V7
10 000			16.0						VY2682M59V5U5E6V5	VY2682M59V5U5E6V7
									VY2103M63V5U5E6V5	VY2103M63V5U5E6V7
									VY2103M63V5U5E6V7	VY2103M63V5U5E6V7
VY2 for leadspacing 7.5 mm										
10										
15		U2J (N750)							VY2150K29U2J5E6V7	VY2150K29U2J5E6V7
22	± 10								VY2220K29U2J5E6V7	VY2220K29U2J5E6V7
33									VY2330K29U2J5E6V7	VY2330K29U2J5E6V7
47									VY2470K29U2J5E6V7	VY2470K29U2J5E6V7
68			7.5						VY2680K29V5S5E6V7	VY2680K29V5S5E6V7
100									VY2101K29V5S5E6V7	VY2101K29V5S5E6V7
150		Y5S (2C3)							VY2151K29V5S5E6V7	VY2151K29V5S5E6V7
220	± 10			5.0	7.5	3.0			VY2221K29V5S5E6V7	VY2221K29V5S5E6V7
330									VY2331K29V5S5E6V7	VY2331K29V5S5E6V7
470									VY2471K29V5S5E6V7	VY2471K29V5S5E6V7
680									VY2681M29V5U5E6V7	VY2681M29V5U5E6V7
1000			8.0						VY2102M29V5U5E6V7	VY2102M29V5U5E6V7
1500			9.0						VY2152M31V5U5E6V7	VY2152M31V5U5E6V7
2200		Y5U (2E3)							VY2222M35V5U5E6V7	VY2222M35V5U5E6V7
3300	± 20		10.5						VY2332M41V5U5E6V7	VY2332M41V5U5E6V7
3900			11.0						VY2392M43V5U5E6V7	VY2392M43V5U5E6V7
4700			12.5						VY2472M49V5U5E6V7	VY2472M49V5U5E6V7
6800			14.5						VY2682M59V5U5E6V7	VY2682M59V5U5E6V7
10 000			16.0						VY2103M63V5U5E6V7	VY2103M63V5U5E6V7
VY2 for leadspacing 10.0 mm										
10										
15									VY2100K29U2J5E6V0	VY2100K29U2J5E6V0
22		U2J (N750)							VY2150K29U2J5E6V0	VY2150K29U2J5E6V0
33									VY2220K29U2J5E6V0	VY2220K29U2J5E6V0
47									VY2330K29U2J5E6V0	VY2330K29U2J5E6V0
68	± 10								VY2470K29U2J5E6V0	VY2470K29U2J5E6V0
100			7.5						VY2680K29V5S5E6V0	VY2680K29V5S5E6V0
150		Y5S (2C3)							VY2101K29V5S5E6V0	VY2101K29V5S5E6V0
220				5.0	10.0	3.0			VY2221K29V5S5E6V0	VY2221K29V5S5E6V0
330									VY2331K29V5S5E6V0	VY2331K29V5S5E6V0
470									VY2471K29V5S5E6V0	VY2471K29V5S5E6V0
680									VY2681M29V5U5E6V0	VY2681M29V5U5E6V0
1000			8.0						VY2102M29V5U5E6V0	VY2102M29V5U5E6V0
1500			9.0						VY2152M31V5U5E6V0	VY2152M31V5U5E6V0
2200		Y5U (2E3)							VY2222M35V5U5E6V0	VY2222M35V5U5E6V0
3300	± 20		10.5						VY2332M41V5U5E6V0	VY2332M41V5U5E6V0
3900			11.0						VY2392M43V5U5E6V0	VY2392M43V5U5E6V0
4700			12.5						VY2472M49V5U5E6V0	VY2472M49V5U5E6V0
6800			14.5						VY2682M59V5U5E6V0	VY2682M59V5U5E6V0
10 000			16.0						VY2103M63V5U5E6V0	VY2103M63V5U5E6V0

Notes

- (1) 1st digit of the clear text code number to be completed with the packaging code.
- (2) On request available: ± 10 % tolerance for capacitance value 680 pF.
- (3) On request available: ± 10 % tolerance for capacitance value 680 pF.

- Straight leads are available on request.

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