

Product Selection

Further Information

Ordering Code

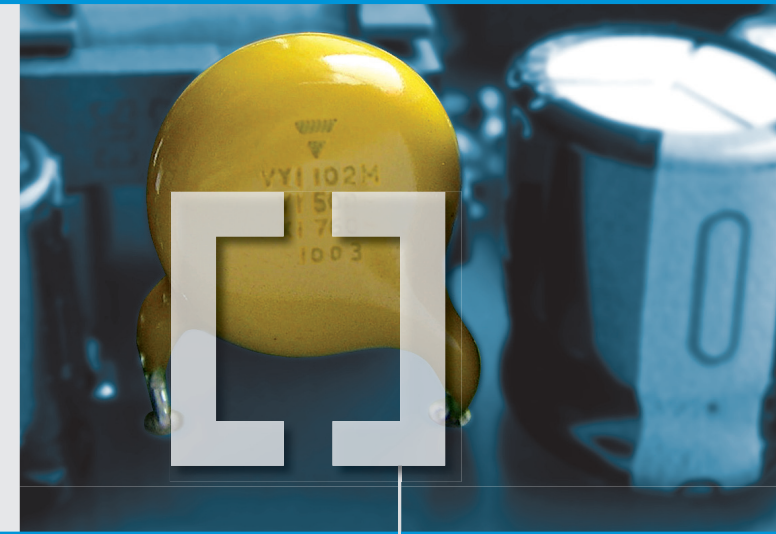
VY1	472	M	63	Y5U	G	6	U	V	0
Series	Capacitance Code	Capacitance Tolerance	Size Code	Temperature Characteristic	Voltage Code	Lead Diameter	Packing Code	Lead Style	Lead Space
VY1 or VY2	Two significant digits + no. of zeros, in pF	K=±10%; M=±20%; Z=+80% -20%	See data sheet	According to EIA198	Q=VY1; S=VY2; G=halogen-free	6=0.6mm; 8=0.8mm	T=tape & reel; U=ammo; 3=bulk	L=straight; K, V=crimped	5=5mm; 7=7.5mm; 0=10mm

Stock Program

Y-Class	Cap. [pF]	Cap.-Tol.	Pitch [mm]	Vishay PN
Y1	220	± 10%	10.0	VY1221K31Y5SG6UV0
	470	± 20%	10.0	VY1471M31Y5UG6UV0
	1,000	± 20%	10.0	VY1102M35Y5UG6UV0
	2,200	± 20%	10.0	VY1222M47Y5UG6UV0
	3,300	± 20%	10.0	VY1332M59Y5UG6UV0
	4,700	± 20%	10.0	VY1472M63Y5UG6UV0
Y2	220	± 10%	5.0	VY2221K29Y5SG6UV5
	220	± 10%	7.5	VY2221K29Y5SG6UV7
	470	± 10%	5.0	VY2471K29Y5SG6UV5
	470	± 10%	7.5	VY2471K29Y5SG6UV7
	1,000	± 20%	5.0	VY2102M29Y5UG6UV5
	1,000	± 20%	7.5	VY2102M29Y5UG6UV7
	2,200	± 20%	5.0	VY2222M35Y5UG6UV5
	2,200	± 20%	7.5	VY2222M35Y5UG6UV7
	3,300	± 20%	5.0	VY2332M41Y5UG6UV5
	3,300	± 20%	7.5	VY2332M41Y5UG6UV7
	4,700	± 20%	5.0	VY2472M49Y5UG6UV5
	4,700	± 20%	7.5	VY2472M49Y5UG6UV7
	10,000	± 20%	7.5	VY2103M63Y5UG6UV7
	10,000	± 20%	10.0	VY2103M63Y5UG6UV0

Vishay is one of the world's largest manufacturers of discrete semiconductors and passive electronic components.

Vishay components are used in virtually all types of electronic devices and equipment, in the industrial, computer, automotive, consumer, telecommunications, military, aerospace, power supplies, and medical markets. Vishay Intertechnology's global footprint includes manufacturing facilities in China and four other Asian countries, Israel, Europe, and the Americas, as well as sales offices around the world.



Product Marketing

Izzet Cakmakoglu

Tel. +49 (0) 7231 801 - 461 | Mobile +49 (0) 175 936 88 96
E-Mail: izzet_cakmakoglu@rutronik.com

Markus Balke

Tel. +49 (0) 7231 801 - 423 | Mobile +49 (0) 160 90 18 65 76
E-Mail: markus_balke@rutronik.com

Rutronik Elektronische Bauelemente GmbH
Industriestr. 2 | 75228 Ispringen | Germany
www.rutronik.com

Committed to excellence

VY1 and VY2 Series

AC Line Rated Disc Capacitors



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Vishay VY1 and VY2 Series

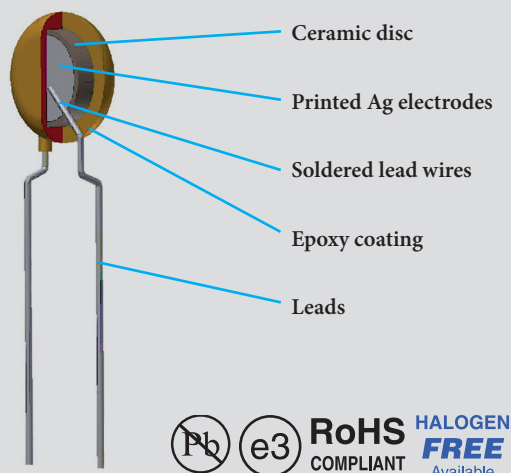
General Information of Safety Capacitors

Safety capacitors are fixed capacitors for electromagnetic interference suppression and connection to the supply mains. This means these capacitors are used for AC line filtering or AC interference suppression.

Class X capacitors are used in “across-the-line” applications.

Class Y capacitors are used in “line-to-ground” (line-bypass) applications.

Structure of a Ceramic Disc Capacitor



Features & Benefits

- Operating temperature range:
- 40 °C to +125 °C
- Climatic Category:
40/125/21 according to EN 60068-1
- Packaging:
bulk, tape and reel, taped ammopack
- Complying with IEC 60384-14.3
- High reliability
- Connection leads are made of tinned copper having a diameter of 0.6 mm
- Compliant to IEC 60384-14.3, to RoHS Directive 2011/65/EU and
- REACH Regulation EC 1907/2006
- through-hole construction with silver plating on both sides of a ceramic disc
- Halogen-free according to IEC 61249-2-21

Why halogen-free?

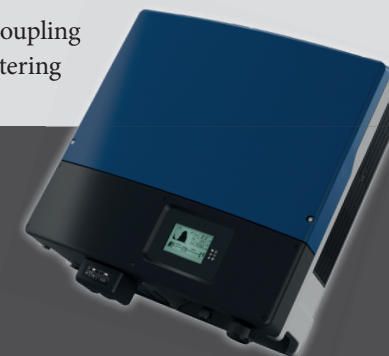
- Higher temperatures in continuous operation
- The growing concern because of the risk of corrosive and toxic emissions of halogen-containing components, if they catch fire
- The trend towards more environmentally friendly alternatives to halogenated materials

Specifications

Series	VY1	VY2
Lead Space	10.0 mm	5.0, 7.5 or 10.0 mm
Capacitance Range	10 pF to 4,700 pF	10 pF to 10,000 pF
Rated Voltage U_R	IEC 60384-14.3 UL 60384-14.1 CSA E60384-1:03 2nd edition CSA E60384-14:09 2nd edition	
	(X1): 760 VAC, 50 Hz (Y1): 500 VAC, 50 Hz	(X1): 440 VAC, 50 Hz (Y2): 300 VAC, 50 Hz
Test Voltage	VY1	VY2
Component test (100%)	4,000 VAC, 50 Hz, 2 s	2,600 VAC, 50 Hz, 2 s
		2,600 VAC for LS 7.5 mm and 10 mm 2,200 VAC for LS 5.0 mm
Random sampling test (destructive test)	4,000 VAC, 50 Hz, 60 s	2,600 VAC, 50 Hz, 60 s
Voltage proof of coating (destructive test)	4,000 VAC, 50 Hz, 60 s	2,600 VAC, 50 Hz, 60 s

Applications:

- Metering
- Power supply
- Automation
- Lighting
- Antenna coupling
- AC line filtering
- Welding equipment
- Any electrical application where over voltage surge can occur



A failure of a safety capacitor must not cause any electrical shock hazards.

The Vishay VY1 and VY2 Series already meet the limits for the halogen-free definition.