



**New Vishay Intertechnology Y1 Safety Capacitors Require Up to 40 % Less Board Space,
Enable Product Miniaturization**

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Devices Comply With IEC 60384-14, Combine Y1 Rating of 300 VAC and 1500 VDC With Insulation Resistance $\geq 10\,000\text{ M}\Omega$ in SMD Casing

MALVERN, Pa., Aug. 11, 2026 (GLOBE NEWSWIRE) -- Vishay Intertechnology, Inc. (NYSE: VSH) today introduced a new series of AC line rated ceramic disc safety capacitors with a Y1 rating of 300 VAC and 1500 VDC in a surface-mount casing. Designed for EMI / RFI suppression and filtering in industrial environments, the Vishay BCcomponents SMDY1...S series reduces board space requirements by up to 40 % compared to previous-generation devices, enabling product miniaturization.

The single-layer capacitors released today are ideal for industrial motor drives, welding equipment, inverters, UPS, rail power supplies, HVAC systems, and LED drivers. They will also be used in smart home automation systems; computer switch mode power supplies and AC/DC converters; consumer appliances including washing machines and refrigerators; and automotive charging stations. For these applications, the devices comply with IEC 60384-14 and are certified by UL, CSA, VDE, ENEC, and CQC. Their Y1 rating enables them to bridge double or reinforced insulation, while supporting use in DC networks up to 1500 VDC in accordance with IEC standard Annex H.

While the industry standards for insulation resistance and operating temperature range are 6000 M Ω and -40 °C to +125 °C, respectively, SMDY1...S series capacitors offer enhanced performance with insulation resistance $\geq 10,000\text{ M}\Omega$ and an operating temperature range from -55°C to +125 °C. To ensure the highest reliability, the devices undergo rigorous 100 % production testing. Every component is subjected to comprehensive end of line testing, including a five-point verification protocol covering AC voltage, capacitance, dissipation factor, insulation resistance, and final visual inspection.

The surface-mount design of the SMDY1...S series supports pick and place assembly with a reflow soldering process, eliminating the manual soldering steps required for through-hole components to simplify manufacturing and reduce production costs. RoHS-compliant and halogen-free, the capacitors consist of a copper- / silver-plated ceramic disc and feature encapsulation made of flame-resistant epoxy resin in accordance with UL 94 V-0. The devices are available in A (10 pF to 680 pF) and B (1000 pF to 1500 pF) case sizes.

Device Specification Table:

Series	SMDY1...S					
Ceramic Class	1		2			
Ceramic dielectric	U2J		Y5S		Y5U	
Voltage (V _{AC})	Y1: 300 (1500 V _{DC})	X1: 440	Y1: 300 (1500 V _{DC})	X1: 440	Y1: 300 (1500 V _{DC})	X1: 440
Min. capacitance (pF)	10					
Max. capacitance (pF)	1500					
Capacitance tolerance (%)	$\pm 10, \pm 20$					
Mounting	Surface-mount					

Samples and production quantities of the SMDY1...S series are available now, with lead times of 12 weeks.

Vishay manufactures one of the world's largest portfolios of discrete semiconductors and passive electronic components that are essential to innovative designs in the automotive, industrial, computing, consumer, telecommunications, military, aerospace, and medical markets. Serving customers worldwide, Vishay is **The DNA of tech.**® Vishay Intertechnology, Inc. is a Fortune 1000 Company listed on the NYSE (VSH). More on Vishay at www.Vishay.com.

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Links to product datasheets:

<http://www.vishay.com/ppg?28586> (SMDY1...S)

Link to product photo:

<https://www.flickr.com/photos/vishay/albums/72177720334950169>

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