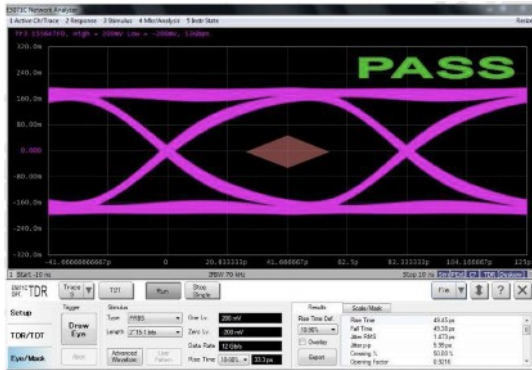


Taiwan Semiconductor’s ESD Protection Devices Claim Industry’s Lowest Capacitance

New TESD Series offers a wide selection of parts protecting a full spectrum of I/O devices; ultra-low capacitance assures negligible effect on normal operation while surviving repeated ESD events

Brea, CA. — February 16, 2023 — [Taiwan Semiconductor](https://www.taiwansemi.com), a global supplier of discrete power



electronics devices, LED drivers, analog ICs and ESD protection devices, introduces the TESD Series of ultra-low-capacitance ESD protection devices. The Series comprises a wide selection of SMD components, providing single and multiple, unidirectional and bidirectional versions, for I/O ports (USB 2.0, USB 3.0, HDMI), audio systems, power ports and a variety of other ESD protection applications. The industry-leading low capacitance topology of the TESD Series provides protection at high frequency data rates while maintaining signal integrity.

[\(Click on image to download hi-res JPG\)](#)

In I/O port applications, TESD Series devices meet regulatory requirements including repetitive application of IEC61000-4-2 (ESD) $\pm 15\text{kV}$ (air), $\pm 10\text{kV}$ (contact) and IEC61000-4-5 (Lightning): 5.5A (8/20 μs). These devices also meet 30 KV contact/air requirements for power port applications. In addition, the Series meets all global environmental requirements. The devices’ ultra-low capacitance is essential for $\pm 3.3\text{V}$ or other nominal operating voltage applications operating at high data rates. The ESD protection devices ideally have little to no effect on normal operation while retaining the ability to survive repeated application of ESD discharges.

“By using these high-performance protection devices, the ESD is absorbed and safely clamped–dissipated through the TVS diodes – preventing expensive damage and increasing the reliability and survivability of the end equipment,” said Sam Wang, Vice President, TSC Products. “This is achieved while also providing margin on protection and signal integrity.”

For more information and links to complete product specifications, click on the following links:

- https://www.taiwansemi.com/en/product_search/esd-protection-ic
- https://www.taiwansemi.com/en/product_search/esd-protection-diode-array

Price (Production Quantities): From \$0.0848 (depending on part number and volume.)
Availability: In-stock at Mouser and DigiKey
Design Automation Files: Footprint, 3D Mechanical Files and CAD Symbols

[Taiwan Semiconductor will be exhibiting at APEC 2023, March 20-22, Booth 762](#)

About Taiwan Semiconductor (TSC).

Recognized for more than 40 years for its core competence in discrete power rectifiers, Taiwan Semiconductor’s expanded product portfolio provides a complete solution from one source: including trench Schottky’s, MOSFETs, power transistors, LED driver ICs, analog ICs and ESD protection devices. A global enterprise with 2,000 over employees, TSC’s production facilities in China and Taiwan are fully compliant with current automotive and environmental standards such as IATF16949, ISO9001 and ISO14001. Taiwan Semiconductor products are used in a vast array of applications in the electronics industry including automotive, computer, consumer, industrial, telecom and photovoltaic. Through strategic expansion of innovative manufacturing capabilities and its focus on pioneering efficient semiconductor solutions, TSC is the right choice for a successful and lasting business relationship.

Contacts:

Kevin Parmenter,
 Director, Applications Engineering
[TSC America, Inc](https://www.tscusa.com)
 415.271.0425
kevin.parmenter@tscus.com

Greg Evans, PE.
 Account Executive
[WelComm, Inc.](https://www.welcomm.com)
 858.633.1911
greg@welcomm.com