

New VCUT05D1-SD0 BiSy ESD Protection Diode

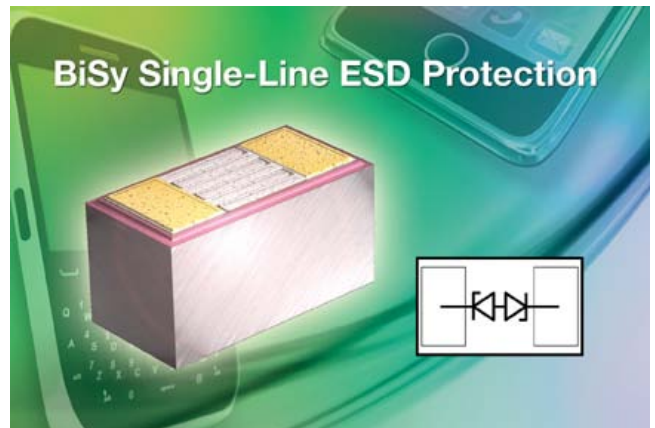
The News:

Vishay Intertechnology's New BiSy Single-Line ESD Protection Diode in Ultra-Compact CLP0603 Silicon Package Offers Low Capacitance of 10 pF and Leakage Current of < 0.1 μ A

Vishay Intertechnology, Inc. (NYSE: VSH) announces the new VCUT05D1-SD0 bidirectional symmetrical (BiSy) single-line ESD protection diode in the new ultra-compact CLP0603 silicon package. Enabling very significant PCB space savings, the device provides low capacitance for signal and data lines protection from transient voltage signals in portable electronics.

Product Benefits:

- Ultra-compact CLP0603 silicon package
 - Tiny 0.6 mm by 0.3 mm footprint
 - Very low package height of < 0.3 mm
- Low capacitance of 10 pF
- Low leakage current of < 0.1 μ A at the working voltage of 5.5 V
- Reverse breakdown voltage of 8 V at 1 mA
- Maximum clamping voltage of 10 V at 1 A
- Provides transient protection for one data line as per IEC 61000-4-2 at \pm 30 kV (air and contact discharge)
- High surge current protection according to IEC 61000-4-5 at 6 A
- Lead (Pb)-free device
- Complies with RoHS 2002/95/EC and WEEE 2002/96/EC



The Key Specifications:

- CLP0603 silicon package
- 5.5 V working voltage
- 8 V typical breakdown voltage at 1 mA
- < 0.1 μ A leakage current
- 10 V max. clamping voltage at 1 A
- 10 pF capacitance



Product Group: Vishay Semiconductors, Diodes

- Air and contact discharge (IEC 61000-4-2) at ± 30 kV

Market Applications:

- ESD protection in portable gaming systems, digital cameras, MP3 players, mobile phones, smart phones, and other portable systems

The Perspective:

The ultra-compact CLP0603 silicon package of Vishay's new VCUT05D1-SD0 BiSy single-line ESD protection diode features a tiny 0.6 mm by 0.3 mm footprint with a very low package height of < 0.3 mm. The device requires just a third of the space as devices in the 1006 (mm) or 0603 (in.) footprint packages for active ESD protection in portable electronics. The leadless CLP0603 package enables a diode with very low line inductance, allowing fast transients such as ESD strikes to be clamped with minimal over- or undershoots. The VCUT05D1-SD0 provides low capacitance and transient protection for one data line as per IEC 61000-4-2 at ± 30 kV (air and contact discharge).

To access the product datasheet on the Vishay Web site, go to <http://www.vishay.com/doc?83443> (VCUT05D1-SD0)