# Protect High Speed Data Circuits from ESD Damage without Distorting Data 

## Introducing the PS04LTVA1 Low Trigger Voltage ESD Suppressor in a Discrete 0402 SMD Device

## - Maintains Signal Integrity

The ultra-low capacitance ( 0.05 pF typical) leaves high speed data circuits untouched so ICs can function as designed.

## - Protects ICs from ESD Damage

Low trigger and clamping voltage delivers enhanced ESD protection of very sensitive ICs.
The polymer based Voltage Variable Material reacts in less than 1 ns to suppress damaging ESD strikes away from the IC allowing for continued operation.

- Provides Long Lasting Protection

The robust design withstands over 1000 ESD strikes under normal operating conditions, allowing continued protection over the lifetime of the product.

## - Space Savings

The discrete 0402 SMD design saves precious PCB space while giving designers flexibility in device placement for superior ESD protection schemes.

- High, Reliable Performance

Tested to meet automotive specifications
(AEC-Q200 Rev C standard for MLV).

- Environmentally Friendly

Cooper Bussmann offers ESD suppressors that are RoHS compliant, and halogen free, making them a great choice for any global application.

## PS04LTVA1 Specifications

Catalog Symbols: PS04LTVA1
Packaging: 10,000 per Reel
Technology: Polymer Voltage Variable Material ESD Suppressor
Electrical Characteristics:

- Working Voltage: 5Vdc Typical
- Clamp Voltage: 25 V Typical
- Trigger Voltage 150V Typical
- Capacitance @ 1MHz: 0.05pF Typical
0.15pF Maximum
- Attenuation Change: -0.2dB Typical (0-6GHz)
- ESD Pulse Withstand: >1000 Pulses Typical

ESD Capability:

- IEC61000-4-2 Direct Discharge: 8kV
- IEC61000-4-2 Air Discharge: 15kV

Product Dimensions - in (mm)



Ideal for protecting high speed data ports.

- USB 2.0/3.0
- IEEE 1394b
- HDMI 1.3
- DVI
- High speed ethernet
- Test probe I/O ports
- Controller I/O ports

Typical Applications:

- Computers and peripherals
- HDTV Equipment
- DVD Players
- A/V Equipment
- Satellite radio
- Cell phones
- PDAs
- Digital still cameras
- Digital camcorders
- MP3/Multimedia players
- Set top boxes
- External storage
- DSL Modems
- LCD TV / Monitor
- Game consoles
- Medical equipment

Design Considerations:
The location in the circuit has to be carefully determined. For better performance, the device should be placed as close to the signal input as possible and ahead of any other component. Due to the high current associated with an ESD event, it is recommended to use a " 0 -stub" pad design (pad directly on the signal/data line and second pad directly on common ground).

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components
Click to view similar products for ESD Suppressors / TVS Diodes category:
Click to view products by Eaton manufacturer:
Other Similar products are found below :
60KS200C D12V0H1U2WS-7 D18V0L1B2LP-7B 82356050220 D5V0M5U6V-7 NTE4902 P4KE27CA P6KE11CA P6KE39CA-TP P6KE8.2A SA110CA SA60CA SA64CA SMBJ12CATR SMBJ8.0A SMLJ30CA-TP ESD101-B1-02ELS E6327 ESD112-B1-02EL E6327 ESD119B1W01005E6327XTSA1 ESD5V0L1B02VH6327XTSA1 ESD7451N2T5G 19180-510 CPDT-5V0USP-HF 3.0SMCJ33CA-F 3.0SMCJ36A-F HSPC16701B02TP D3V3Q1B2DLP3-7 D55V0M1B2WS-7 DESD5V0U1BL-7B DRTR5V0U4SL-7 SCM1293A-04SO ESD200-B1-CSP0201 E6327 ESD203-B1-02EL E6327 SM12-7 SMF8.0A-TP SMLJ45CA-TP CEN955 W/DATA 82350120560 82356240030 VESD12A1A-HD1-GS08 CPDUR5V0R-HF CPDUR24V-HF CPDQC5V0U-HF CPDQC5V0USP-HF CPDQC5V0-HF D1213A-01LP4-7B D1213A-02WL-7 ESDLIN1524BJ-HQ 5KP100A 5KP15A

