

Protect high speed data circuits from ESD damage without distorting data



PS04LTVA1

Eaton's Bussmann® Series Introduces the PS04LTVA1 low trigger voltage ESD suppressor in a discrete 0402 SMD device.

Maintains signal strength

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).

Design considerations

The location in the circuit for the PS04LTVA1 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).

Environmentally friendly

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

Applications

- High speed data ports
- Computers and peripherals
- HDTV Equipment
- DVD Players
- A/V Equipment
- Satellite radio
- Mobile phones
- MP3/Multimedia players
- Set top boxes
- External storage
- LCD TV / Monitor
- Game consoles
- Medical equipment



Powering Business Worldwide

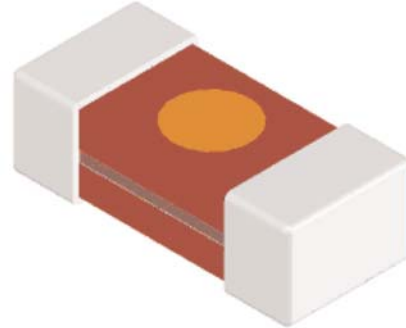
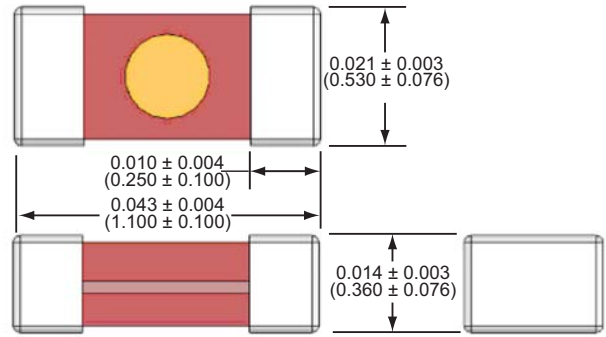
Catalog Symbol: PS04LTVA1

Technology: Polymer voltage variable material

Electrical Characteristics:

- Working Voltage: 5 Vdc typical
- Clamp Voltage: 25 V typical
- Trigger Voltage: 150 V typical
- Capacitance @ 1 MHz: 0.05 pF typical, 0.15 pF maximum
- Attenuation change: -0.2 dB typical (0- 6 GHz)
- ESD pulse withstand: > 1000 pulses typical
- EC61000-4-2 Direct Discharge: 8 kV
- IEC61000-4-2 Air Discharge: 15 kV

Dimensions- inches/mm



Technical Application Assistance

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Order samples on-line: <https://tools.eatonelectronics.com/request-form>

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