

Protect High Speed Data Circuits from ESD Damage without Distorting Data

Introducing Ultra-Low Capacitance ESD Protection in a Discrete 0402 SMD Device

1. Maintains Signal Integrity

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

2. Protects IC's from ESD Damage

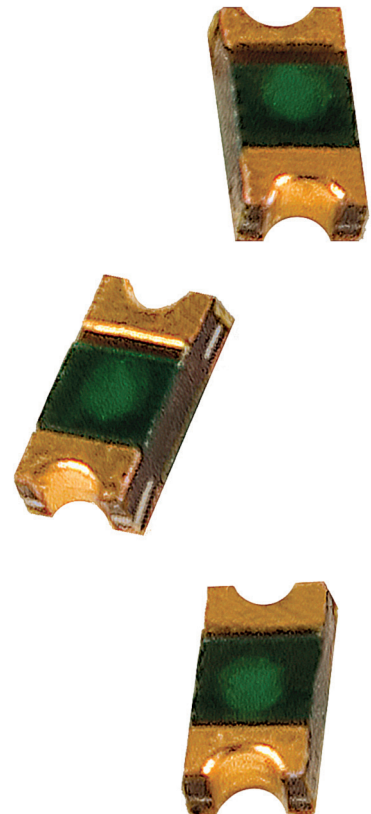
The polymer based Voltage Variable Material reacts in less than 1ns to suppress damaging ESD strikes away from the IC allowing for continued operation.

3. Provides Long Lasting Protection

The robust design withstands over 1,000 ESD strikes under normal operating conditions, allowing continued protection over the lifetime of the product.

4. Space Savings

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

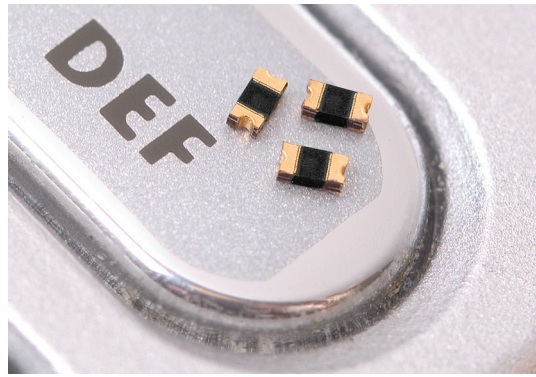


0402ESDA-MLP Fuse Specifications



Catalog Symbol: 0402ESDA-MLP7 (10,000 / reel)
0402ESDA-MLP8 (2,500 / reel)

Technology: Polymer Voltage Variable Material
ESD Suppressor



Electrical Characteristics

Rated Voltage: 30VDC max.

Clamp Voltage: 35V typ.

Trigger Voltage: 300V typ.

Capacitance (@12V): 0.05pF typ.
0.15pF max.

Attenuation Change: -0.2dB typ. (0-6GHz)

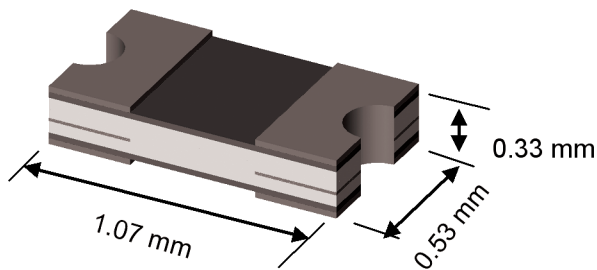
ESD Pulse Withstand: >1000 pulses typ.

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

Ideal for protection of high speed data ports such as:

- USB 2.0
- IEEE 1394
- HDMI
- DVI
- High Speed Ethernet
- Test Probe I/O Ports
- Controller I/O Ports

Product Dimensions (mm):



Typical Applications:

- Cell Phones
- Computers & Peripherals
- DVD Players
- Digital Radio
- Digital Set Top Boxes
- Digital Still Cameras
- Broadband Network Equipment
- MP3 / Multimedia Players
- Test & Measurement Equipment

Design Considerations:

The location in the circuit for the MLP series 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).

Our mission is to be the first choice for target customers seeking application specific power management and protection solutions in the Digital Home & Office and Mobile Electronics world.



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