



PRODUCT DATA SHEET

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Datasheet



Resources

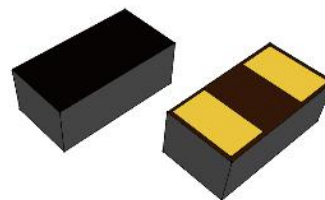


Samples

Please note: Please check the JINGAO Semiconductor website to verify the updated device numbers. The most current and up-to-date ordering information can be found at www.jg-semi.cn. Please email any questions regarding the system integration to JINGAO_questions@jgsemi.com.

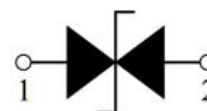
Features

- Ultra-Low capacitance:0.05pF(typ.)
- Low leakage current(<10nA)
- Fast response time(<1ns)
- Bi-directional,single line protection
IEC 61000-4-2 (ESD Air): 15kV
IEC 61000-4-2 (ESD Contact): 8kV


0603

Applications

- USB 3.0/3.1
- HDMI 1.3/1.4/2.0
- RF Antenna
- SATA and eSATA Interface



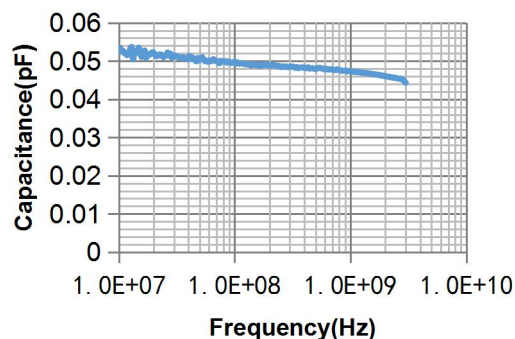
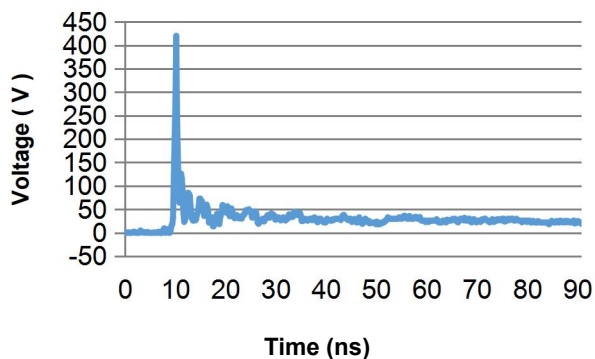
Limiting Values($T_A = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)

| Symbol | Parameter | Conditions | Min | Max | Unit |
|-----------|---------------------------------|----------------------------------|-----|-----|--------------------|
| V_{ESD} | Electrostatic Discharge Voltage | IEC 61000-4-2; Contact Discharge | - | 8 | kV |
| | | IEC 61000-4-2; Air Discharge | - | 15 | kV |
| T_A | Operating Temperature Range | - | -55 | 125 | $^{\circ}\text{C}$ |
| T_{stg} | Storage Temperature Range | - | -40 | 85 | $^{\circ}\text{C}$ |

Electrical Characteristics($T_A = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)

| Symbol | Parameter | Conditions | Min | Typ. | Max | Unit |
|----------|------------------------------|-------------------------------------|-----|------|-----|------|
| V_{DC} | Continuous Operating Voltage | - | - | - | 5.0 | V |
| V_T | Trigger Voltage | IEC61000-4-2 8kV contact discharge | - | 450 | - | V |
| V_C | Clamping Voltage | IEC61000-4-2 8kV contact discharge | - | 40 | - | V |
| I_L | Leakage Current | DC 5V shall be applied on component | - | - | 10 | nA |
| C_J | Capacitance | Measured at 10MHz | - | 0.05 | - | pF |

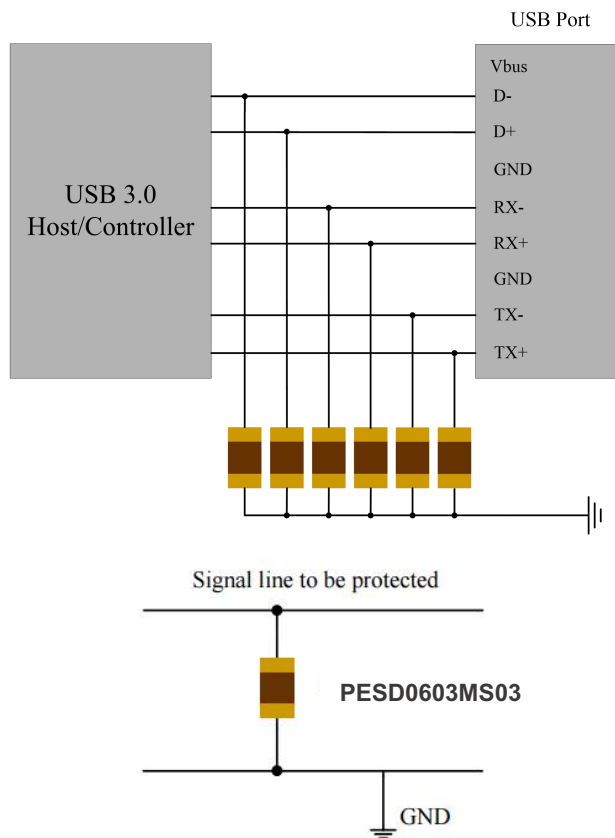
Typical Characteristics



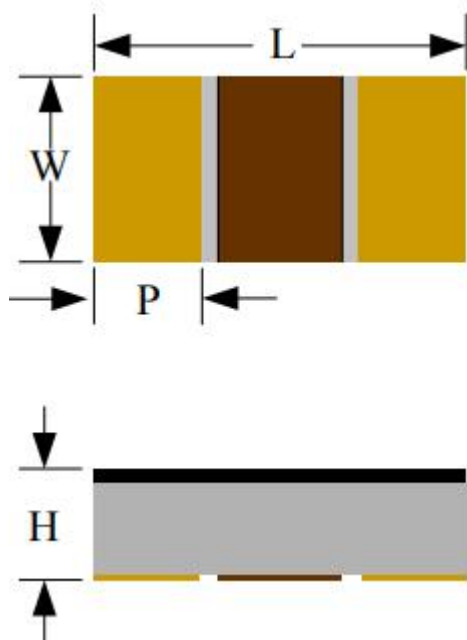
ESD Protection for Signal Line

The PESD is designed for the protection of one bidirectional data line from ESD damage.

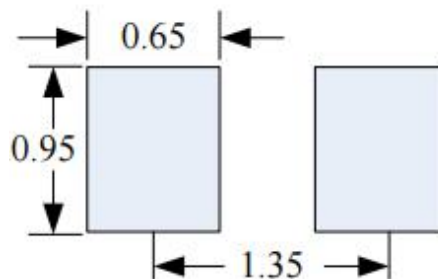
- Place the PESD as close to the input terminal or connector as possible.
- Minimize the path length between the PESD and the protected signal line.
- Use ground planes whenever possible.



Package Dimension



Recommended Solder Pad Footprint



***Sizes in mm**

Notes:

This solder pad layout is for reference purposes only.

| Dimension | Unit: Millimeters | |
|-----------|-------------------|------|
| | Min. | Max. |
| L | 1.45 | 1.75 |
| W | 0.70 | 0.95 |
| P | 0.20 | 0.50 |
| H | 0.26 | 0.46 |

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