

# MSKSEMI

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



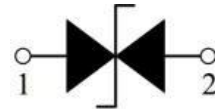
PLED

Product data sheet

**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

**Schematic Diagram**



**Applications**

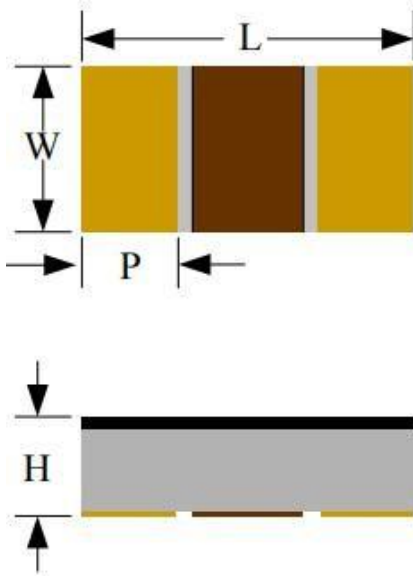
- USB 3.0/3.1
- HDMI 1.3/1.4/2.0
- RF Antenna
- SATA and eSATA Interface

**Limiting Values(T<sub>A</sub> = 25 °C, unless otherwise specified)**

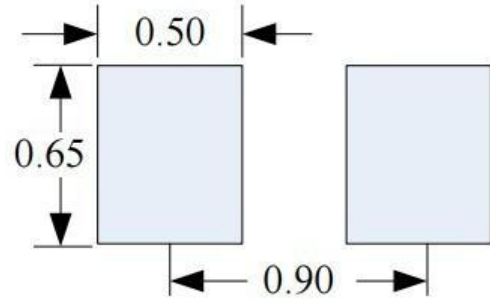
| Symbol           | Parameter                       | Conditions                       | Min | Max | Unit |
|------------------|---------------------------------|----------------------------------|-----|-----|------|
| V <sub>ESD</sub> | Electrostatic Discharge Voltage | IEC 61000-4-2; Contact Discharge | -   | 8   | kV   |
|                  |                                 | IEC 61000-4-2; Air Discharge     | -   | 15  | kV   |
| T <sub>A</sub>   | Operating Temperature Range     | -                                | -55 | 125 | °C   |
| T <sub>stg</sub> | Storage Temperature Range       | -                                | -40 | 85  | °C   |

**Electrical Characteristics(T<sub>A</sub> = 25 °C unless otherwise specified)**

| Symbol          | Parameter                    | Conditions                          | Min | Typ. | Max | Unit |
|-----------------|------------------------------|-------------------------------------|-----|------|-----|------|
| V <sub>DC</sub> | Continuous Operating Voltage | -                                   | -   | -    | 18  | V    |
| V <sub>T</sub>  | Trigger Voltage              | IEC61000-4-2 8kV contact discharge  | -   | 450  | -   | V    |
| V <sub>C</sub>  | Clamping Voltage             | IEC61000-4-2 8kV contact discharge  | -   | 40   | -   | V    |
| I <sub>L</sub>  | Leakage Current              | DC 5V shall be applied on component | -   | -    | 10  | nA   |
| C <sub>J</sub>  | Capacitance                  | Measured at 10MHz                   | -   | 0.05 | -   | pF   |



**Recommended Solder Pad Footprint**



**\*Sizes in mm**

Notes:

This solder pad layout is for reference purposes only.

| Dimension | Unit: Millimeters |      |
|-----------|-------------------|------|
|           | Min.              | Max. |
| L         | 0.90              | 1.10 |
| W         | 0.42              | 0.62 |
| p         | 0.15              | 0.35 |
| H         | 0.25              | 0.45 |

**REEL SPECIFICATION**

| P/N           | PKG     | QTY   |
|---------------|---------|-------|
| ESD18VF1BL-MS | SOD-882 | 10000 |

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