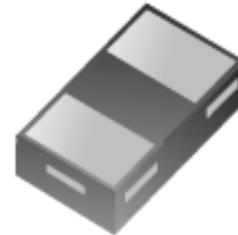


Features

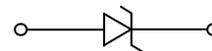
- 50 Watts peak pulse power ($t_p = 8/20\mu s$)
- SOD-882 package
- Unidirectional configurations
- Protects one I/O port
- Low clamping voltage and leakage current
- Ultra low capacitance
- ESD-immunity acc. IEC 61000-4-2 $\pm 8KV$ contact
 $\pm 15KV$ air



SOD-882

Applications

- USB 3.0, USB 2.0, MHL
- HDMI 2.0, Display Port 1.3, eSATA
- Ultrabooks, Notebooks
- Smart Phones
- Tablets, eReaders
- High Speed Serial Interfaces



Schematic Diagram

Absolute Maximum Ratings

($T_A = 25^\circ C$ unless otherwise specified)

| Parameter | Symbol | Value | Unit |
|--|-----------|-------------|------------|
| Peak Pulse Power ($T_P = 8/20\mu s$) | P_{PP} | 50 | W |
| Peak Pulse Current ($T_P = 8/20\mu s$) | I_{PP} | 2.5 | A |
| Junction Temperature | T_J | -55 to +125 | $^\circ C$ |
| Storage temperature | T_{STG} | -55 to +150 | $^\circ C$ |

Electrical Characteristics

($T_A = 25^\circ C$ unless otherwise specified)

| Parameter | Symbol | Condition | Min | Typ | Max | Unit |
|---------------------------|-----------|----------------------------------|-----|-----|------|---------|
| Reverse stand-off Voltage | V_{RWM} | - | - | - | 5 | V |
| Reverse Breakdown Voltage | V_{BR} | $I_T = 1mA$ | 6 | - | - | V |
| Reverse Leakage Current | I_R | $V_R = 5V$ | - | - | 1 | μA |
| Clamping Voltage | V_C | $I_{PP} = 2.5A, T_P = 8/20\mu s$ | - | - | 18.4 | V |
| Junction Capacitance | C_J | $V_R = 0V, f = 1MHz$ | - | 0.3 | - | pF |

Typical Characteristic Curves

Fig.1 Peak Pulse Power Rating Curve

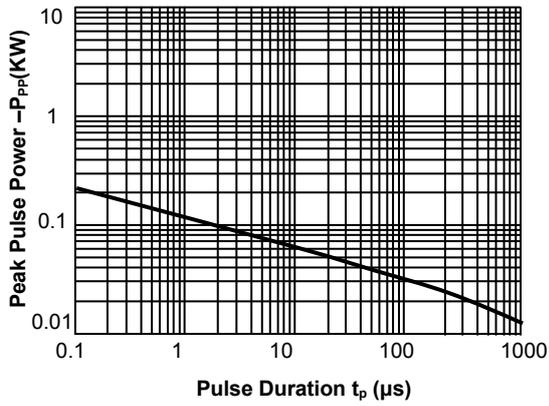


Fig.2 Pulse Derating Curve

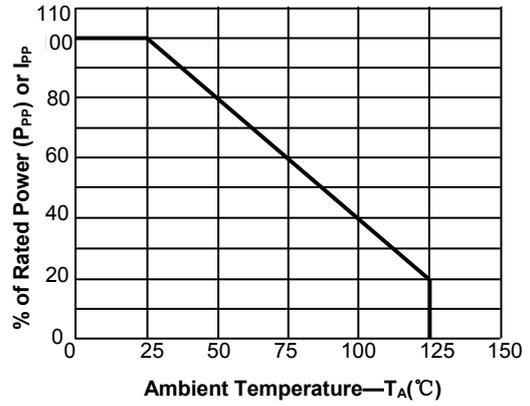


Fig.3 Pulse Waveform-8/20 μ s

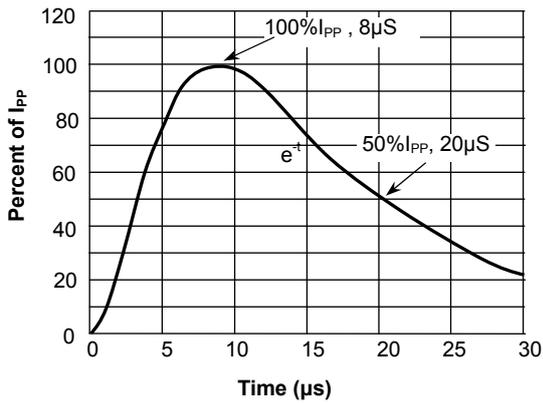
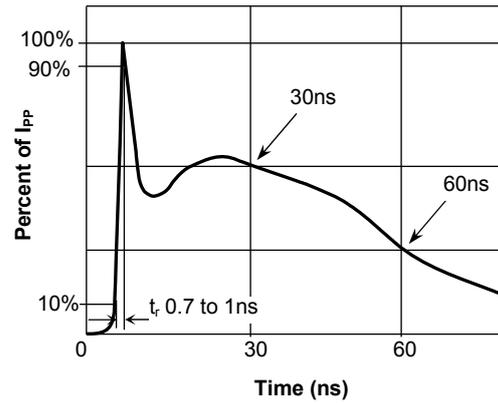
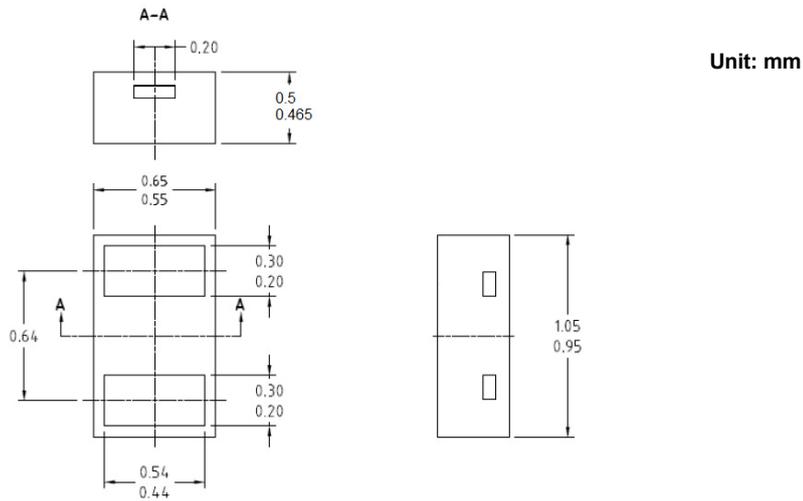


Fig.4 Pulse Waveform-ESD(IEC61000-4-2)



Product Dimensions SOD-882



Order Information

| Device | Package | Carrier | Quantity | HSF Status |
|--------------------|---------|-------------|-----------------|----------------|
| SPESPLC5VD882SP-2U | SOD-882 | Tape & Reel | 10000pcs / Reel | RoHS compliant |