

Features

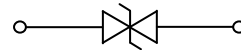
- 150 Watts peak pulse power ($t_p = 8/20\mu s$)
- SOD-882 package
- Bidirectional configurations
- Protects one I/O port
- Low clamping voltage
- Low Leakage current
- ESD-immunity acc. IEC 61000-4-2 $\pm 8KV$ contact $\pm 15KV$ air
- IEC 61000-4-4 (EFT) 40A (5/50ns)



SOD-882

Applications

- Cell Phones
- Notebooks
- Digital Cameras
- Portable Instrumentation
- Audio and video equipment



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} | 150 | W |
| Peak Pulse Current ($t_P = 8/20\mu S$) | I_{PP} | 11.2 | 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} | - | - | - | 3.3 | V |
| Reverse Breakdown Voltage | V_{BR} | $I_T = 1mA$ | 5.0 | - | - | V |
| Reverse Leakage Current | I_R | $V_R = 3.3V$ | - | - | 1 | μA |
| Clamping Voltage | V_C | $I_{PP} = 5A, T_P = 8/20\mu S$ | - | - | 8.4 | V |
| | V_C | $I_{PP} = 11.2A, T_P = 8/20\mu S$ | - | - | 14.1 | V |
| Junction Capacitance | C_J | $V_R = 0V, f = 1MHz$ | - | 25 | - | pF |

Typical Characteristic Curves

Fig.1 Peak Pulse Power Rating Curve

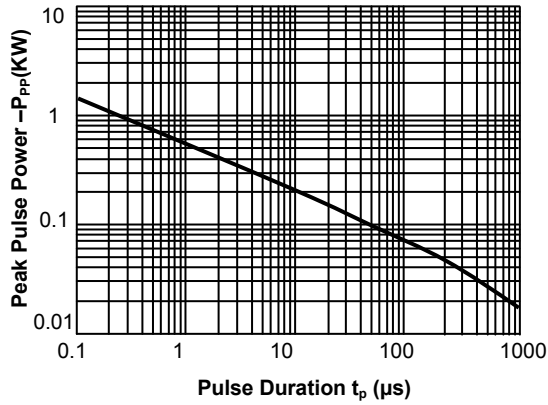


Fig.2 Pulse Derating Curve

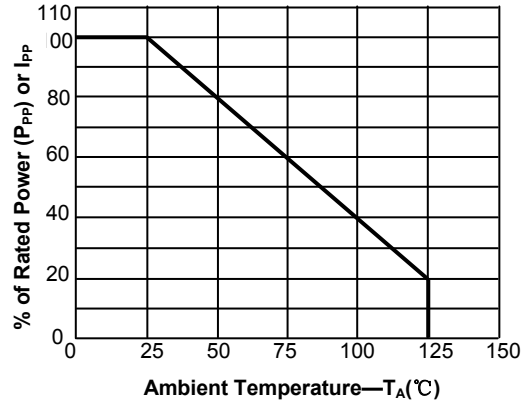


Fig.3 Pulse Waveform-8/20 μs

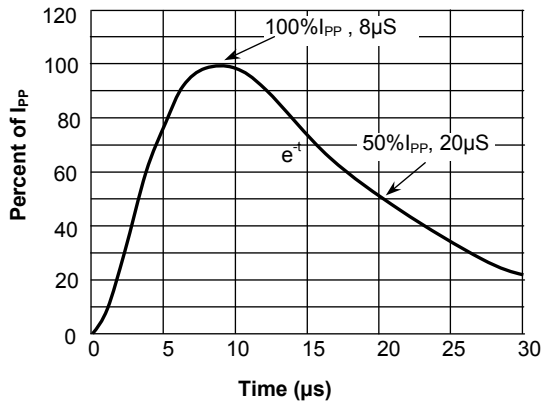
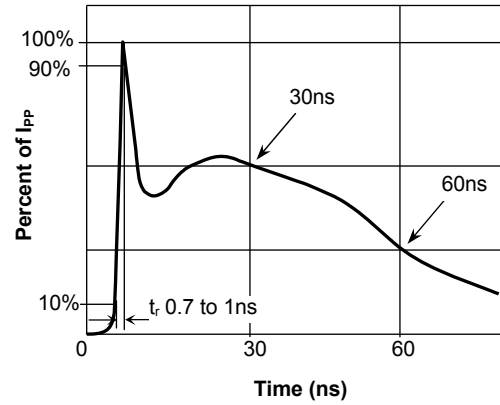
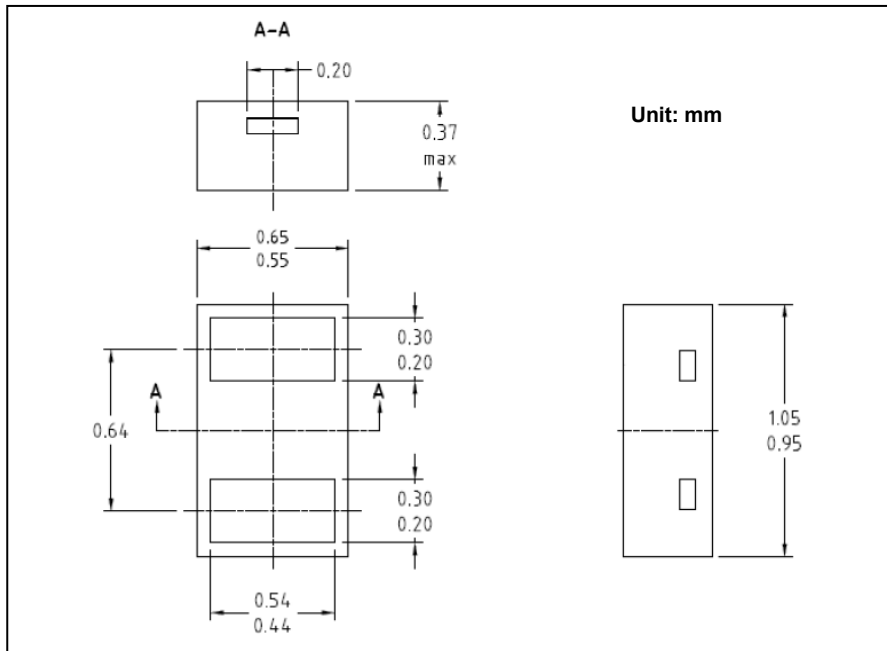


Fig.4 Pulse Waveform-ESD(IEC61000-4-2)



Product Dimensions

SOD-882



Order Information

| Device | Package | Marking | Carrier | Quantity | HSF Status |
|-----------------|---------|---------|-------------|-----------------|----------------|
| SPESP3V3D882-2B | SOD-882 | B | Tape & Reel | 10000pcs / Reel | RoHS compliant |