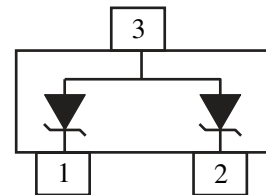


Features

- 350 Watts peak pulse power ($t_P = 8/20\mu s$)
- Protects one bidirectional or two unidirectional lines
- Fast response time, typically $< 1\text{ ns}$
- Excellent clamping voltage
- Low leakage current
- IEC 61000-4-2 $\pm 30\text{kV}$ (Air) ESD protection
- IEC 61000-4-2 $\pm 30\text{kV}$ (Contact) ESD protection
- IEC 61000-4-5 25A ($8/20\mu s$) Lightning protection



SOT-23



Schematic Diagram

Applications

- Cellular Handsets and Accessories
- Portable Electronics
- Control & Monitoring Systems
- Servers, Notebooks, and Desktop PCs
- Set-Top Box
- Communication Systems

Absolute Maximum Ratings ($T_A=25^\circ\text{C}$ unless otherwise specified)

| Parameter | Symbol | Max. | Unit |
|--|-----------|-------------|------------------|
| Peak Pulse Power ($t_P=8/20\mu s$) | P_{PP} | 350 | W |
| Peak Pulse Current ($t_P=8/20\mu s$) | I_{PP} | 25 | A |
| Operating Temperature | T_J | -55 To +125 | $^\circ\text{C}$ |
| Storage Temperature | T_{STG} | -55 To +150 | $^\circ\text{C}$ |

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

| Parameter | Symbol | Conditions | Min. | Typ. | Max. | Unit |
|---------------------------|-----------|---------------------------------------|------|------|------|---------------|
| Reverse Stand-Off Voltage | V_{RWM} | - | - | - | 3.3 | V |
| Reverse Breakdown Voltage | V_{BR} | $I_T=1\text{mA}$ | 4 | 5 | - | V |
| Reverse Leakage Current | I_R | $V_{RWM}=3.3\text{V}$ | - | - | 1 | μA |
| Clamping Voltage | V_C | $I_{PP}=25\text{A}$, $T_P=8/20\mu s$ | - | - | 14 | V |
| Junction Capacitance | C_J | $V_R=0\text{V}$, $f=1\text{MHz}$ | - | 200 | - | pF |

Typical Characteristic Curves

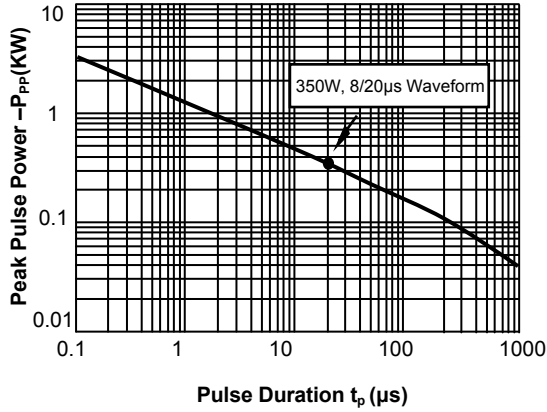


Figure 1. Peak Pulse Power Rating Curve

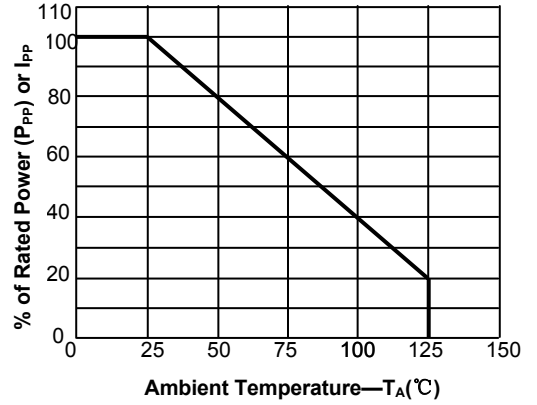


Figure 2. Pulse Derating Curve

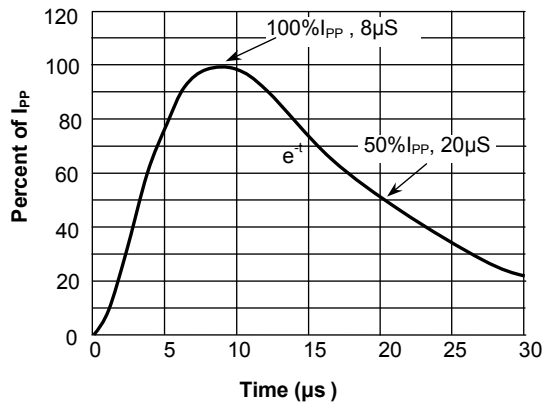


Figure 3. Pulse Waveform-8/20μs

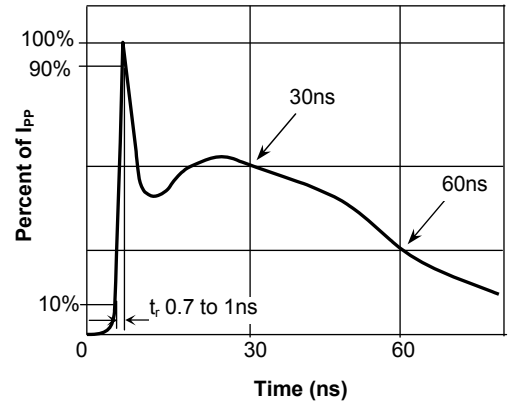
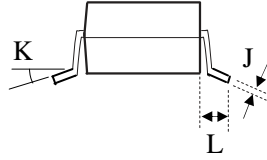
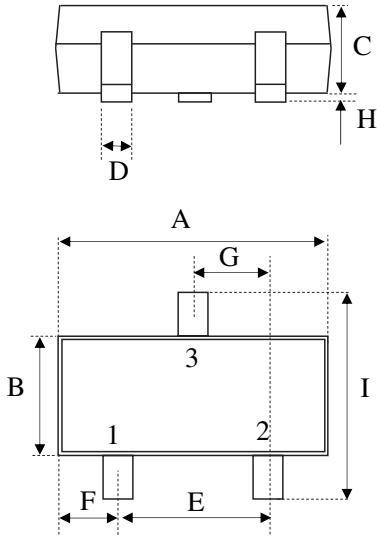


Figure 4. Pulse Waveform-ESD(IEC61000-4-2)

Product Dimensions

SOT-23



| Dim | millimeters | |
|-----|-------------|-------|
| | min | max |
| A | 2.80 | 3.04 |
| B | 1.20 | 1.40 |
| C | 0.89 | 1.11 |
| D | 0.37 | 0.50 |
| E | 1.78 | 2.04 |
| F | 0.45 | 0.60 |
| G | 0.89 | 1.02 |
| H | 0.013 | 0.100 |
| I | 2.10 | 2.50 |
| J | 0.085 | 0.177 |
| K | 0° | 10° |
| L | 0.45 | 0.60 |

Order Information

| Device | Package | Marking | Carrier | Quantity | HSF Status |
|------------|---------|---------|-------------|----------|----------------|
| GSEC3U2000 | SOT-23 | 3M2 | Tape & Reel | 3000pcs | RoHS compliant |