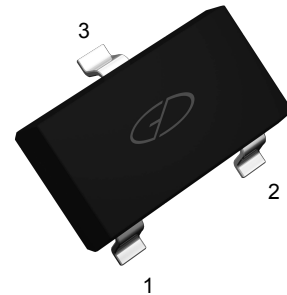
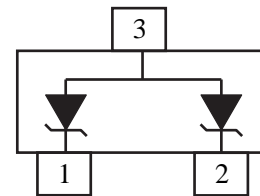


**Features**

- 320 Watts peak pulse power ( $t_P = 8/20\mu s$ )
- SOT-23 package
- Protects one bidirectional or two unidirectional lines
- Fast response time, typically  $< 1$  ns
- Excellent clamping voltage
- Low leakage current
- IEC 61000-4-2  $\pm 30kV$  (Air) ESD protection
- IEC 61000-4-2  $\pm 30kV$  (Contact) ESD protection
- IEC 61000-4-4 40A (5/50ns) EFT protection
- RoHS compliant



**Package: SOT-23**



**Schematic Diagram**

**Applications**

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

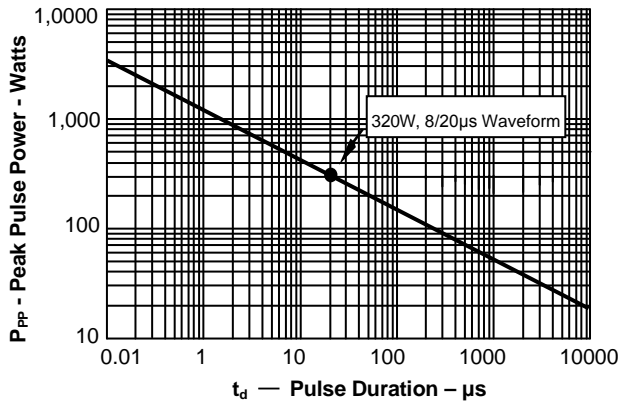
**Absolute Maximum Ratings** ( $T_A=25^\circ C$  unless otherwise specified)

| Parameter                                | Symbol    | Value       | Unit       |
|------------------------------------------|-----------|-------------|------------|
| Peak Pulse Power ( $T_P=8/20\mu S$ )     | $P_{PP}$  | 320         | W          |
| Peak Pulse Current ( $T_P = 8/20\mu S$ ) | $I_{PP}$  | 20          | A          |
| Junction Temperature                     | $T_J$     | -55 to +150 | $^\circ C$ |
| Storage Temperature                      | $T_{STG}$ | -55 to +150 | $^\circ C$ |

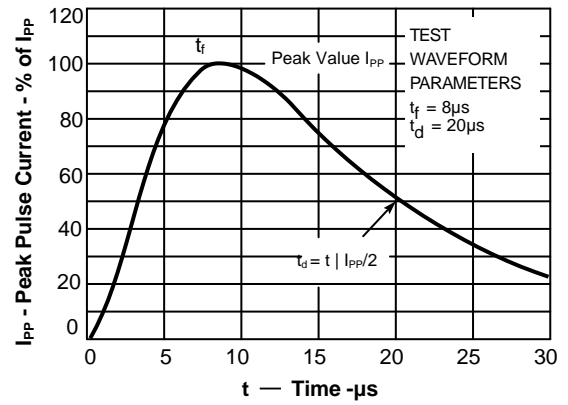
**Electrical Characteristics** ( $T_A=25^\circ C$  unless otherwise specified)

| Parameter                 | Symbols   | Conditions                  | Min | Typ | Max | Units   |
|---------------------------|-----------|-----------------------------|-----|-----|-----|---------|
| Reverse stand-off Voltage | $V_{RWM}$ | -                           | -   | -   | 5   | V       |
| Reverse Breakdown Voltage | $V_{BR}$  | $I_T=1mA$                   | 6   | -   | 7.4 | V       |
| Reverse Leakage Current   | $I_R$     | $V_{RWM}=5V, T=25^\circ C$  | -   | -   | 1   | $\mu A$ |
| Clamping Voltage          | $V_C$     | $I_{PP}=10A, T_P=8/20\mu S$ | -   | -   | 12  | V       |
| Clamping Voltage          | $V_C$     | $I_{PP}=20A, T_P=8/20\mu S$ | -   | -   | 16  | V       |
| Junction Capacitance      | $C_J$     | $V_R=0V, f=1MHz$            | -   | 70  | -   | pF      |

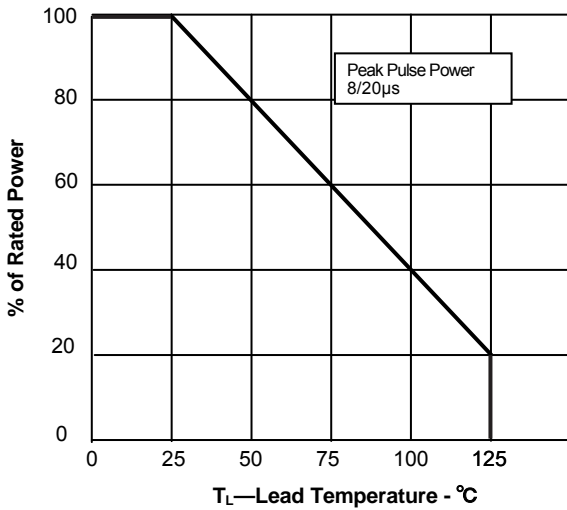
**Typical Characteristic Curves**



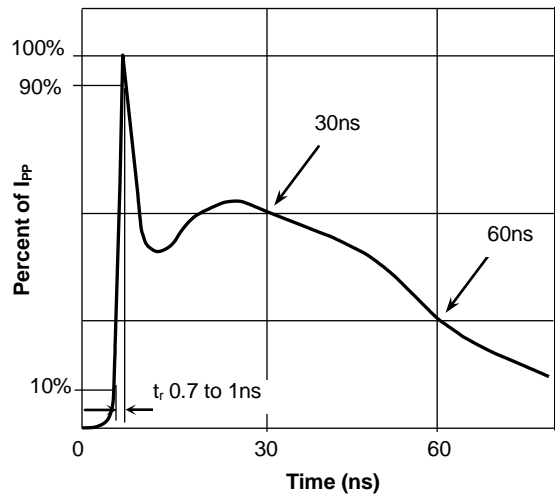
**Figure 1. Peak Pulse Power vs Pulse Time**



**Figure 2. Pulse WaveForm-8/20 $\mu s$**

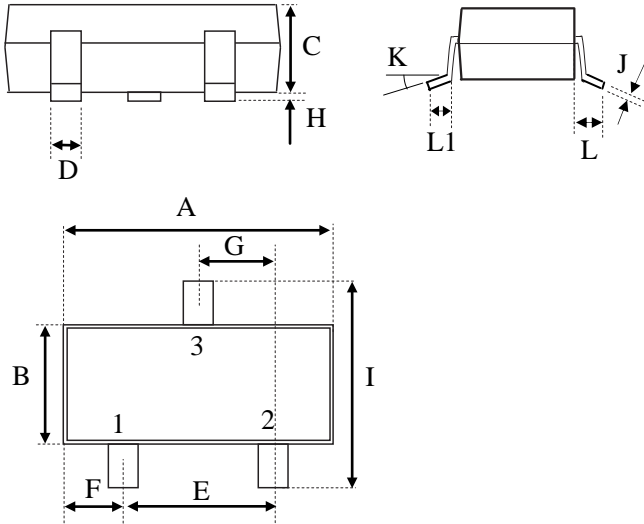


**Figure 3. Power Derating Curve**



**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  |
| L1  | 0.30        | 0.60  |

**Order Information**

| Device    | Package | Marking | Carrier     | Quantity | HSF Status     |
|-----------|---------|---------|-------------|----------|----------------|
| GSEC5U700 | SOT-23  | 5M2     | Tape & Reel | 3000pcs  | RoHS compliant |