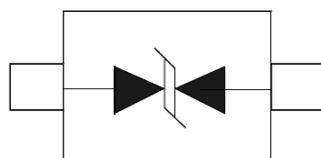
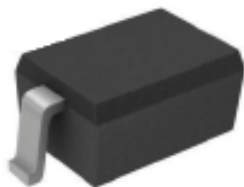



SOD-323

Features

- 400Watts peak pulse power($t_p=8/20\mu s$)
- Low clamping voltage
- Low leakage current
- Glass passivated junction
- Bidirectional configurations
- IEC 61000-4-2 $\pm 30KV$ contact $\pm 30KV$ air
- Halogen free and RoHS compliant

Mechanical Data

- CASE: SOD-323 Molded Plastic
- Molding compound flammability rating: UL 94V-0
- Mounting Position:Any

Making Code & Ordering information

| | <table border="1"> <thead> <tr> <th>Ordercode</th> <th>Package</th> <th>Base qty</th> <th>Deliverymode</th> </tr> </thead> <tbody> <tr> <td>PSD3V03C</td> <td>SOD323</td> <td>3000</td> <td>Tape and reel</td> </tr> </tbody> </table> | Ordercode | Package | Base qty | Deliverymode | PSD3V03C | SOD323 | 3000 | Tape and reel |
|-----------|--|-----------|---------------|----------|--------------|----------|--------|------|---------------|
| Ordercode | Package | Base qty | Deliverymode | | | | | | |
| PSD3V03C | SOD323 | 3000 | Tape and reel | | | | | | |

Maximum Ratings & Thermal Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified.)

| Rating | Symbol | Value | Units |
|--|-----------|----------------|-------|
| Peak Pulse Power ($t_p = 8/20\mu s$) | P_{PP} | 400 | Watts |
| Peak Pulse Current ($t_p = 8/20\mu s$) (note1) | I_{pp} | 20 | A |
| ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact) | V_{ESD} | 30 30 | kV |
| Lead Soldering Temperature | T_L | 260(10seconds) | °C |
| Junction Temperature | T_J | -55 to + 150 | °C |
| Storage Temperature | T_{stg} | -55 to + 150 | °C |

Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified).

| Parameter | Symbol | Conditions | Min | Typical | Max | Units |
|---------------------------|-----------|------------------------------|-----|---------|-----|---------|
| Reverse Stand-Off Voltage | V_{RWM} | | | | 3.0 | V |
| Reverse Breakdown Voltage | V_{BR} | $I_T=1mA$ | 5.0 | | 7.0 | V |
| Reverse Leakage Current | I_R | $V_{RWM}=3.0V, T=25^\circ C$ | | | 1 | μA |
| Clamping Voltage | V_C | $I_{PP}=20A, t_p=8/20\mu s$ | | | 20 | V |
| Junction Capacitance | C_j | $V_R = 0V, f = 1MHz$ | | 100 | | pF |



Ratings and Characteristic Curves

(Ratings at 25°C ambient temperature unless otherwise specified).

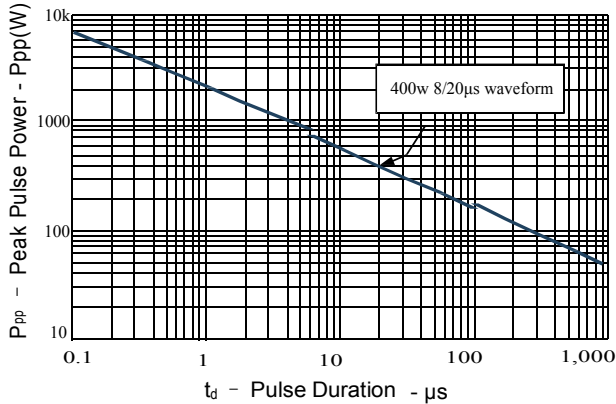


Figure 1: Peak Pulse Power vs. Pulse Time

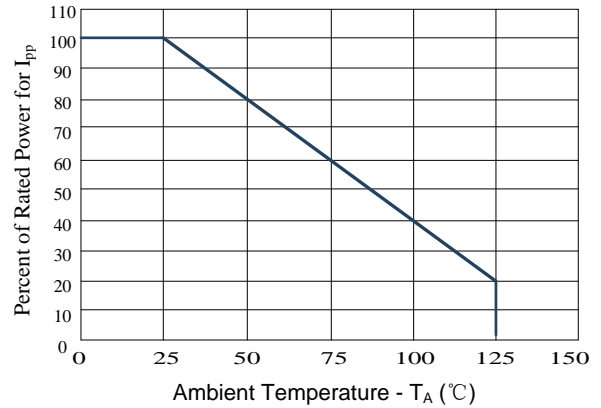


Figure 2: Power Derating Curve

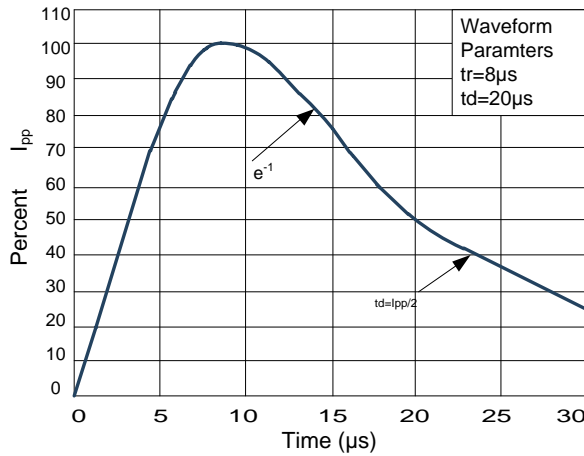


Figure 3: Pulse Waveform

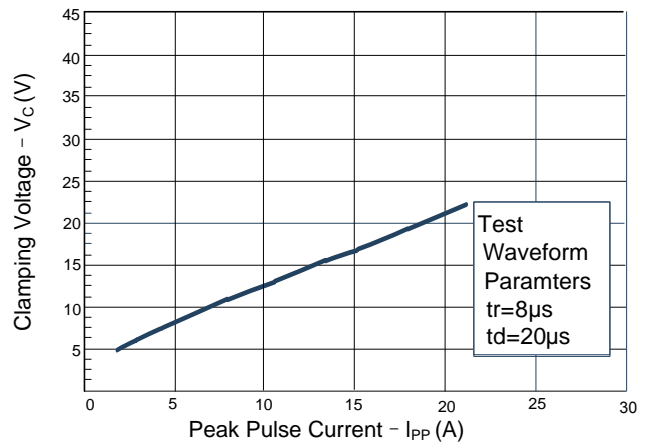
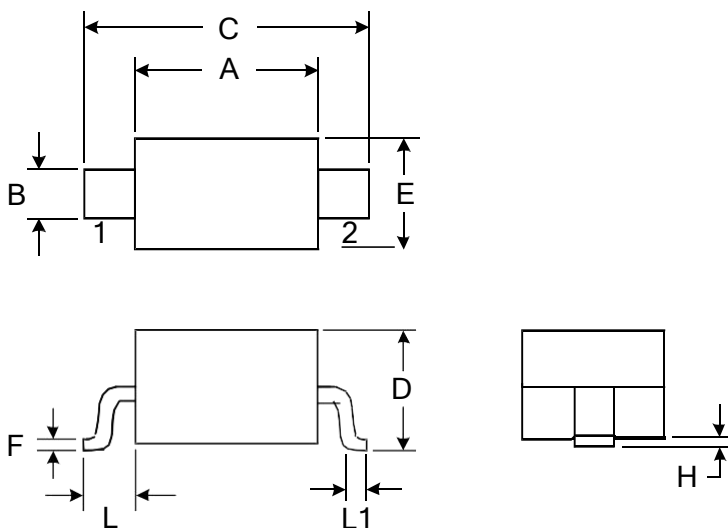


Figure 4: Clamping Voltage vs. Ipp

Package Outline Dimensions: SOD-323



| DIMENSIONS | | | | |
|------------|------------|-------|----------|-------|
| SYMBOL | MILLIMETER | | INCHES | |
| | MIN | MAX | MIN | MAX |
| A | 1.600 | 1.800 | 0.063 | 0.071 |
| B | 0.250 | 0.350 | 0.010 | 0.014 |
| C | 2.500 | 2.700 | 0.098 | 0.106 |
| D | | 1.000 | | 0.039 |
| E | 1.200 | 1.400 | 0.047 | 0.055 |
| F | 0.080 | 0.150 | 0.003 | 0.006 |
| L | 0.475 REF | | 0.019REF | |
| L1 | 0.250 | 0.400 | 0.010 | 0.016 |
| H | 0.000 | 0.100 | 0.000 | 0.004 |