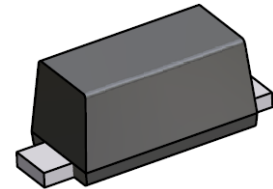


SOD-523 SURFACE MOUNT
Very Small Outline Flat Lead Plastic Package
Transient Voltage Suppressors
ESD Protection Diodes

Green Product



SOD-523 Flat Lead



ELECTRICAL SYMBOL

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

| Symbol | Parameter | Value | Units |
|-----------|--|---------------------|------------------|
| V_{pp} | IEC61000-4-2(ESD) Air Contact | ± 15 ± 8 | KV |
| ESD | Per Human Body Model | 16 | KV |
| P_d | Power Dissipation (Note 1) | 150 | mW |
| T_{STG} | Storage Temperature Range | -55 to +150 | $^\circ\text{C}$ |
| T_J | Operating Junction Temperature | +150 | $^\circ\text{C}$ |
| T_L | Max Lead Solder Temperature range (10 Second Duration) | 260 | $^\circ\text{C}$ |

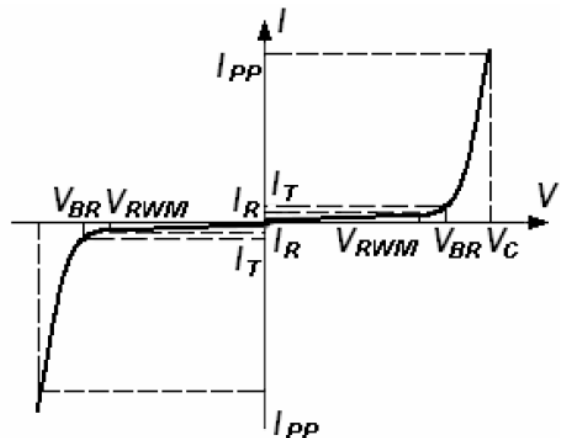
These ratings are limiting values above which the serviceability of the diode may be impaired.
Note 1. FR-5 = 1.0 x 0.75 x 0.62 in.

Specification Features:

- Stand-off Voltage: 3.3V
- Low Leakage
- Response Time is Typically < 1ns
- IEC61000-4-2 Level 4 ESD Protection
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish

Electrical Parameter

| Symbol | Parameter |
|-----------|---|
| I_{PP} | Maximum Reverse Peak Pulse Current |
| V_C | Clamping Voltage @ I_{PP} |
| V_{RWM} | Working Peak Reverse Voltage |
| I_R | Maximum Reverse Leakage Current @ V_{RWM} |
| I_T | Test Current |
| V_{BR} | Breakdown Voltage @ I_T |



Electrical Characteristics (T_A = 25°C unless otherwise noted)

| Device Type | V _{RWM} (Volts) | I _R @ V _{RWM} (μA) | V _{BR} @ I _T (Note 2) (Volts) | | I _T (mA) | I _{PP+} (A) | V _C @ Max I _{PP+} (Volts) | P _{PK+} (W) | C @ V _R = 0V, f = 1MHz (pF) |
|-------------|-----------------------------|---|---|-----|------------------------|-------------------------|--|-------------------------|--|
| | Max | Max | Min | Max | | Max | Max | Max | Typ. |
| AZ5123-01H | 3.3 | 1 | 5.6 | 7.8 | 1.0 | 4 | 12 | 48 | 15 |

+ Surge current waveform per Figure 1.

Note 2: V_{BR} is measured with a pulse test current I_T at an ambient temperature of 25°C.

SURGE CURRENT WAVEFORM:

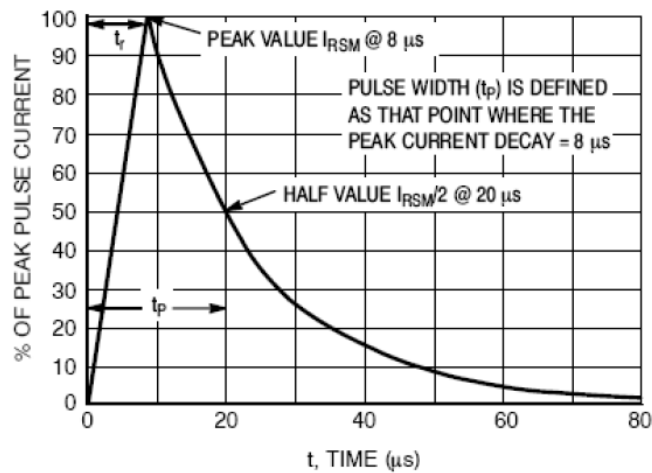
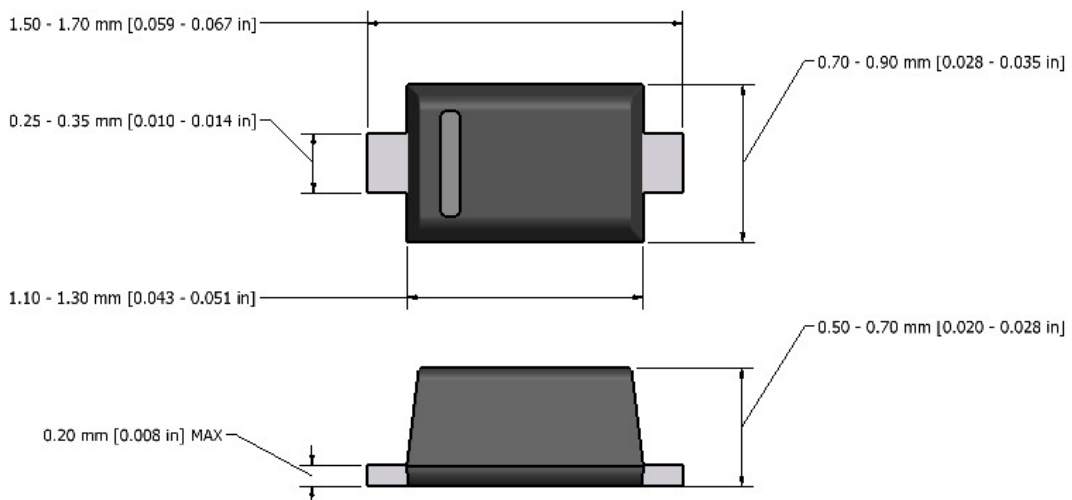


Figure 1. 8 x 20 μs Pulse Waveform

Flat Lead SOD-523 Package Outline



Note: Dimensions are exclusive of Burrs, Mold Flash & Tie Bar extrusions.