

MMSZ4692

General Description

Half watt, General purpose, Medium Current Surface Mount Zener in the SOD-123 package. The SOD-123 package has the same footprint as the glass mini-melf (LL-34) package & provides a convenient alternative to the Leadless package.

Features

- Compact surface mount with same footprint as mini-melf
- 500mW rating on FR-4 or FR-5 board.
- Class 3 ESD rating (>16kV) per Human Body Model

Ordering

- 7 inch reel (178mm); 8mm Tape; 3,000 units per reel.

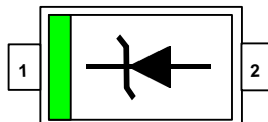
Absolute Maximum Ratings (note 1) $T_A=25^\circ\text{C}$ unless otherwise noted

| Symbol | Parameter | Value | Units |
|--|--|------------|----------------------------|
| T_{STG} | Storage Temperature | -55 ~ 150 | $^\circ\text{C}$ |
| T_J | Maximum Junction Temperature | -55 ~ 150 | $^\circ\text{C}$ |
| P_D | Total Power Dissipation at 25°C Derate above 25°C | 500 6.7 | mW mW/ $^\circ\text{C}$ |
| $R_{\theta JA}$ | Thermal Resistance Junction to Ambient | 340 | $^\circ\text{C}/\text{W}$ |
| $R_{\theta JL}$ | Thermal Resistance Junction to Lead | 150 | $^\circ\text{C}/\text{W}$ |
| ΔV_Z | Maximum Voltage Change (note 2) | 900 | mV |
| Lead Solder Temperature (Max 10 second duration) | | 260 | $^\circ\text{C}$ |
| Nominal Zener Voltage (V_Z) at $50\mu\text{A}$ | | 6.8 | V |

Note 1: These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

Note 2: Voltage change is equal to the difference between V_Z at $100\mu\text{A}$ and V_Z at $10\mu\text{A}$.

Top Mark: CX
1: Cathode
2: Anode

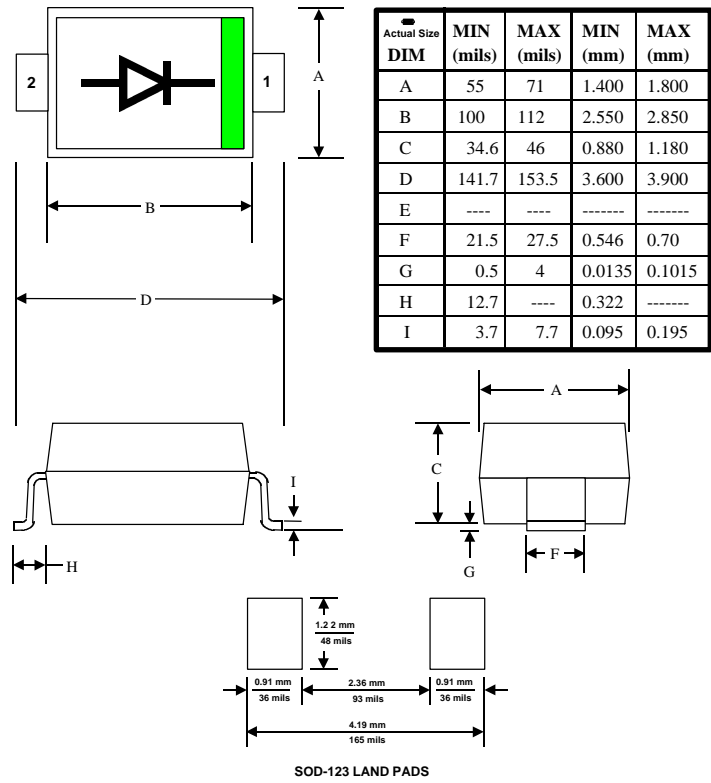


Electrical Characteristics $T_A=25^\circ\text{C}$ unless otherwise noted

| Symbol | Characteristics | Test Conditions | Min. | Max. | Units |
|--------------|------------------------------|--|------|------|---------------|
| V_Z | Zener Voltage | $I_{ZT} = 50\mu\text{A}$ D.C | 6.46 | 7.14 | V |
| I_R | Reverse Leakage | $V_R = 5.1\text{V}$ | | 10 | μA |
| V_F | Forward Voltage | $I_F = 10\text{mA}$ | | 900 | mV |
| ΔV_Z | Delta Zener Voltage (Note 2) | $I_{ZT} = 100\mu\text{A}$ to $10\mu\text{A}$ | | 900 | mV |

SOD-123 PACKAGE
 PACKAGE CODE = (D6)
 Fairchild Semiconductor's Criteria

Corrected March 11, 1998



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| CROSSVOLT™ | FRFET™ | MicroPak™ | QFET™ | SuperSOT™-8 |
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Definition of Terms

| Datasheet Identification | Product Status | Definition |
|--------------------------|------------------------|---|
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