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Fairchild Semiconductor MMSZ4688

For any questions, you can email us directly: sales@integrated-circuit.com

Distributor of Fairchild Semiconductor: Excellent Integrated System Limited

Datasheet of MMSZ4688 - DIODE ZENER 4.7V 500MW SOD123

Contact us: sales@integrated-circuit.com Website: www.integrated-circuit.com



MMSZ4688

5% TOLERANCE

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
- 500 mW rating on FR-4 or FR-5 board.
- Class 3 ESD rating (>16 kV) per Human Body Model

Ordering:

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

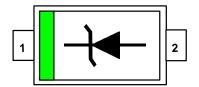
Absolute Maximum Ratings (note 1) TA = 25°C unless otherwise noted

| Parameter | Value | Units |
|-----------------------------------------------------------|-------------|--------------------|
| T _{STG} - Storage Temperature | -55 to +150 | °C |
| T _J - Maximum Junction Temperature | -55 to +150 | οС |
| P _D - Total Power Dissipation at 25°C | 500 | mW |
| Derate above 25°C | 6.7 | mW/ ^o C |
| R _{ØJA} - Thermal Resistance Junction to Ambient | 340 | °C/W |
| R _{ØJL} - Thermal Resistance Junction to Lead | 150 | °C/W |
| | 990 | mV |
| Lead Solder Temperature (Max 10 second duration) | 260 | °С |
| Nominal Zener Voltage (V _Z) at 50 uA | 4.7 | 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 uA and V_z at 10 uA.

Top Mark: **CT** 1: Cathode 2: Anode



Electrical Characteristics

TA = 25°C unless otherwise noted

| SYM | CHARACTERISTICS | MIN | MAX | UNITS | TEST CONDITIONS |
|----------------|---------------------|------|------|-------|------------------------------------------|
| V_Z | Zener Voltage | 4.47 | 4.94 | V | $I_{ZT} = 50.0 \text{ uA D.C}$ |
| I _R | Reverse Leakage | | 10 | uA | V _R = 3.0 V |
| V _F | Forward Voltage | | 900 | mV | I _F = 10 mA |
| ΔV_{Z} | Delta Zener Voltage | | 990 | mV | $I_F = 100 \text{ uA to } 10 \text{ uA}$ |

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PRODUCT STATUS DEFINITIONS

Definition of Terms

| Datasheet Identification | Product Status | Definition |
|--------------------------|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Advance Information | Formative or In Design | This datasheet contains the design specifications for product development. Specifications may change in any manner without notice. |
| Preliminary | First Production | This datasheet contains preliminary data, and supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design. |
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Rev. H3