

MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

SOD4001-MS THRU SOD4007-MS

Product specification

FEATURES

- Glass passivated device
- Ideal for surface mouted applications
- Low reverse leakage
- Metallurgically bonded construction
- High temperature soldering guaranteed:
250 C/10 seconds,0.375”(9.5mm) lead length,
5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: JEDEC SOD-123FL molded plastic body over passivated chip


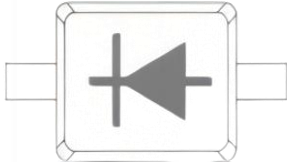
Terminals: Solderable per MIL-STD-750,
Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight:0.0007 ounce, 0.02 grams

Reference News

| PACKAGE OUTLINE | Circuit | PINNING | |
|--|--|---------|-------------|
| | | PIN | DESCRIPTION |
|  <p>SOD-123FL</p> |  | 1 | Cathode |
| | | 2 | Anode |

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

| Catalog Number | SYMBOLS | SOD4001-MS | SOD4002-MS | SOD4003-MS | SOD4004-MS | SOD4005-MS | SOD4006-MS | SOD4007-MS | UNITS |
|---|-----------------|--------------------|------------|------------|------------|------------|------------|------------|--------------------|
| Maximum repetitive peak reverse voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | VOLTS |
| Maximum RMS voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | VOLTS |
| Maximum DC blocking voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | VOLTS |
| Maximum average forward rectified current at $T_A=65\text{ C}$ (NOTE 1) | I_{AV} | 1.0 | | | | | | | Amp |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) $T_L=25\text{ C}$ | I_{FSM} | 25.0 | | | | | | | Amps |
| Maximum instantaneous forward voltage at 1.0A | V_F | 1.1 | | | | | | | Volts |
| Maximum DC reverse current at rated DC blocking voltage | I_R | $T_A=25\text{ C}$ | | | | | | | μA |
| | | $T_A=125\text{ C}$ | | | | | | | |
| Typical junction capacitance (NOTE 2) | C_J | 4 | | | | | | | pF |
| Typical thermal resistance (NOTE 3) | $R_{\theta JA}$ | 180 | | | | | | | K/W |
| Operating junction and storage temperature range | T_J, T_{STG} | -55 to +150 | | | | | | | $^{\circ}\text{C}$ |

Note: 1.Averaged over any 20ms period.

2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

3.Thermal resistance from junction to ambient at 0.375” (9.5mm)lead length,P.C.B. mounted

RATINGS AND CHARACTERISTIC CURVES 1N4001 THRU 1N4007

FIG.1 – TYPICAL FORWARD CHARACTERISTIC

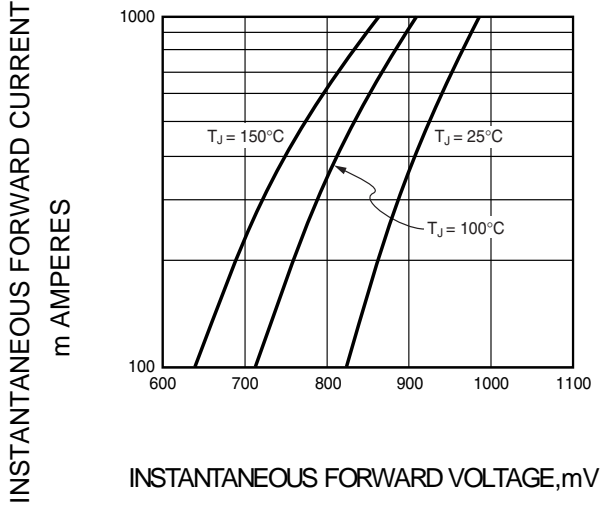


FIG.2 – TYPICAL JUNCTION CAPACITANCE

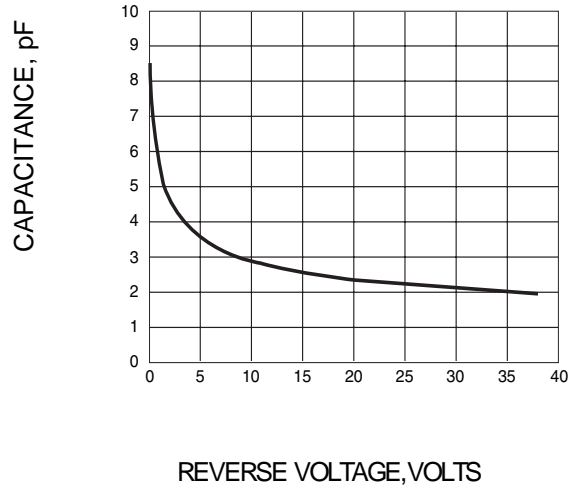


FIG.3 – TYPICAL INSTANTANEOUS REVERSE CHARACTERISTICS

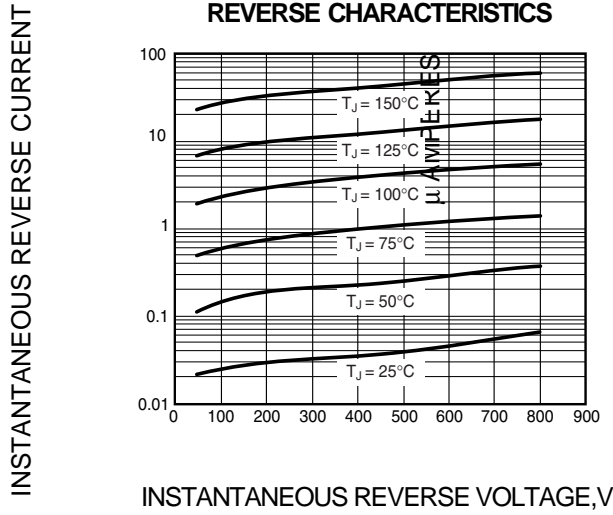
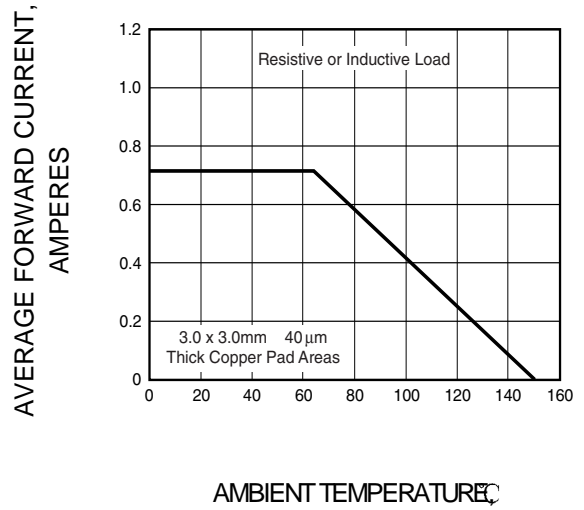
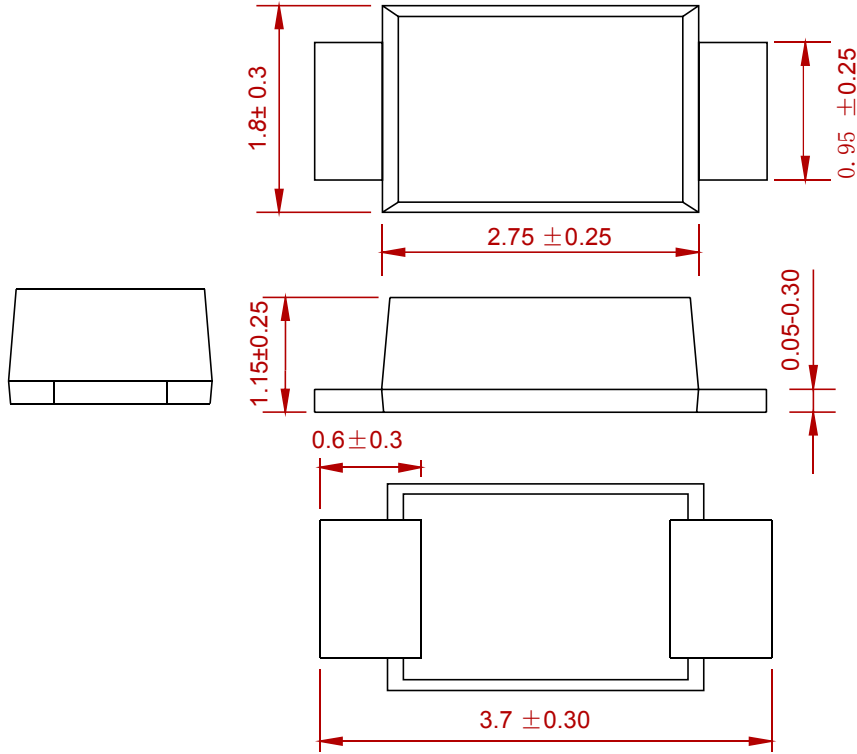


FIG.4 – FORWARD DERATING CURVE

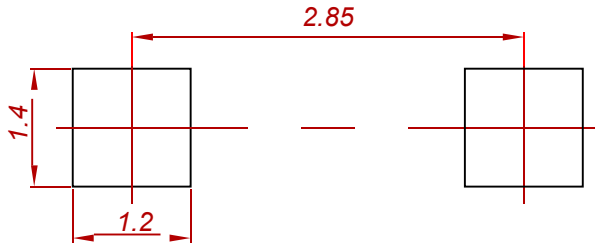


PACKAGE MECHANICAL DATA



Dimensions in millimeters

Suggested Pad Layout



- Note:**
1. Controlling dimension: in millimeters.
 2. General tolerance: ± 0.05 mm.
 3. The pad layout is for reference purposes only.

REEL SPECIFICATION

| P/N | PKG | QTY |
|-----------------------|-----------|------|
| SOD4001-MS-SOD4007-MS | SOD-123FL | 3000 |

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