

MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

1N4001-1N4007

Product specification


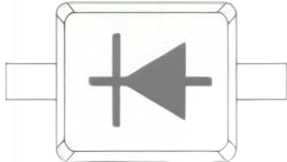
FEATURES

- 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	1N4001 A1	1N4002 A2	1N4003 A3	1N4004 A4	1N4005 A5	1N4006 A6	1N4007 A7	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) $T_L=25\text{ }^\circ\text{C}$	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	$T_A=25\text{ }^\circ\text{C}$							μA
		$T_A=125\text{ }^\circ\text{C}$							50.0
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

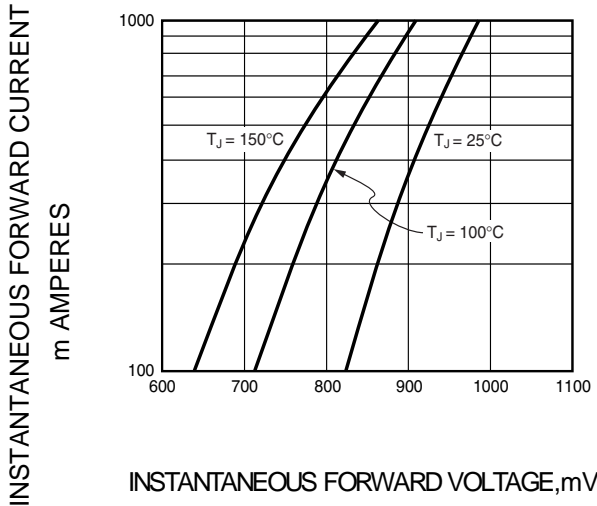


FIG.2 – TYPICAL JUNCTION CAPACITANCE

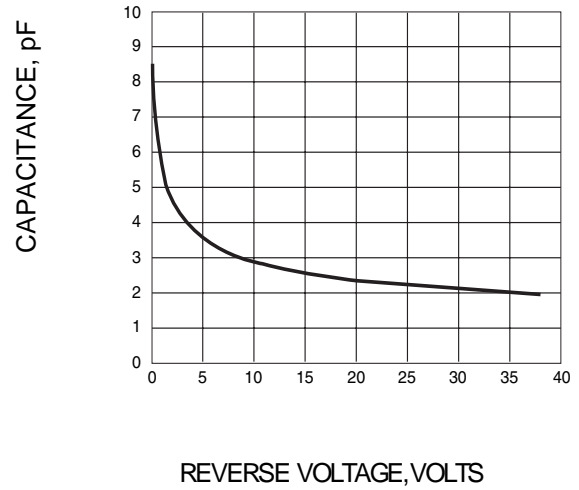


FIG.3 – TYPICAL INSTANTANEOUS REVERSE CHARACTERISTICS

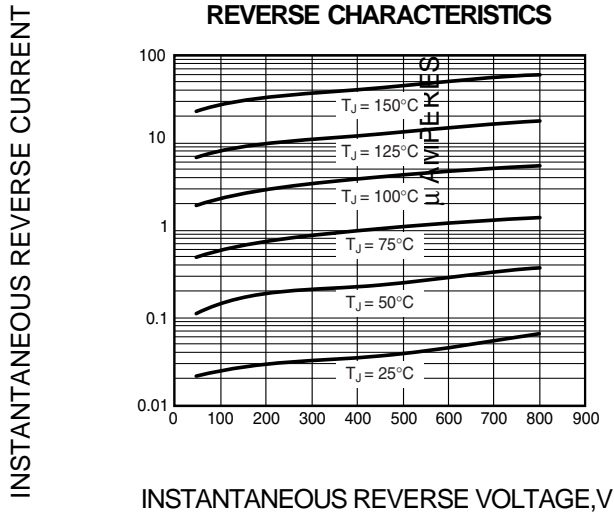
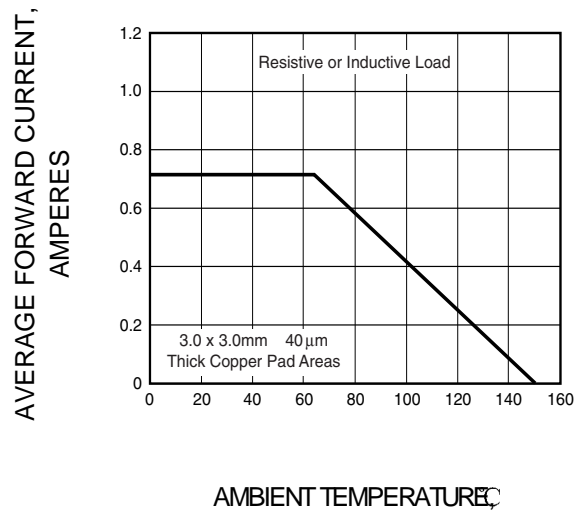
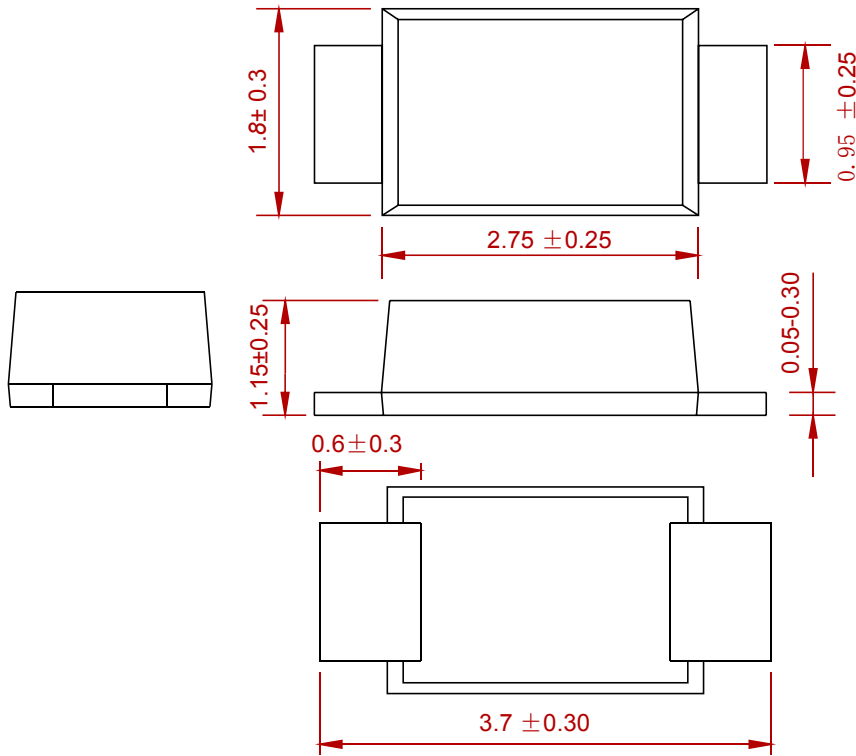


FIG.4 – FORWARD DERATING CURVE

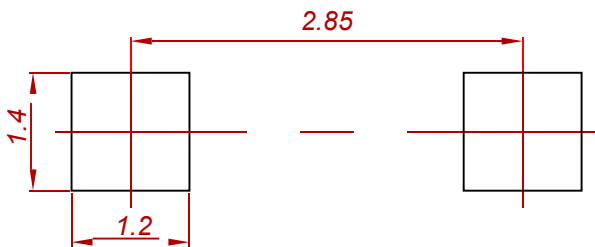


PACKAGE MECHANICAL DATA



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
1N4001-1N4007	SOD-123FL	3000

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