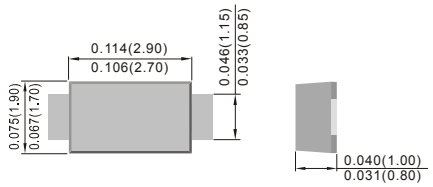
PANJIT SEMI CONDUCTOR

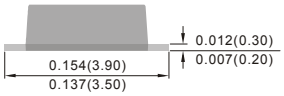
GS1006HE-AU

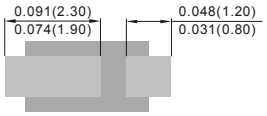
SURFACE GENERAL PURPOSE RECTIFIERS

VOLTAGE 600 Volt **CURRENT** 1 Ampere

SOD-123HE Unit : inch(mm)





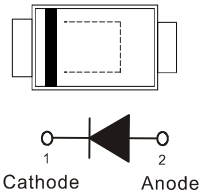


FEATURES

- For surface mounted applications in order to optimize board space
- Ideal for automated placement
- High temperature soldering : 260°C /10 seconds at terminals
- Glass Passivated Chip Junction
- Acquire quality system certificate : TS16949
- AEC-Q101 qualified
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

MECHANICAL DATA

- Case: SOD-123HE, Molded plastic over passivated junction
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0006 ounce, 0.0184 gram
- Standard Packaging: 8mm tape (EIA-481)
- Polarity: Color band denotes cathode end



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNITS
Marking Code	-	H1J	-
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	600	V
Maximum RMS Voltage	V_{RMS}	420	V
Maximum DC Blocking Voltage	V_R	600	V
Maximum Average Forward Current	$I_{F(AV)}$	1	A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30	A
Maximum Forward Voltage at 1A	V_F	1.1	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	1	μA
Typical Junction Capacitance at V_R=0V	C_J	15	pF
Typical Thermal Resistance, Junction to Ambient (Note 1) Junction to Lead (Note 2)	$R_{\theta JA}$ $R_{\theta JL}$	170 32	°C / W
Operating Junction Temperature and Storage Temperature Range	T_J,T_{STG}	-55 to +150	°C

NOTES :

1. Mounted on a FR4 PCB, single-sided copper, with 100cm^2 copper pad area
2. Mounted on a FR4 PCB, single-sided copper, standard footprint

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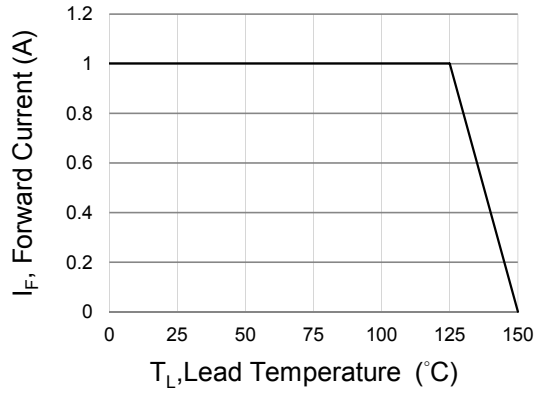

Fig.1 Forward Current Derating Curve

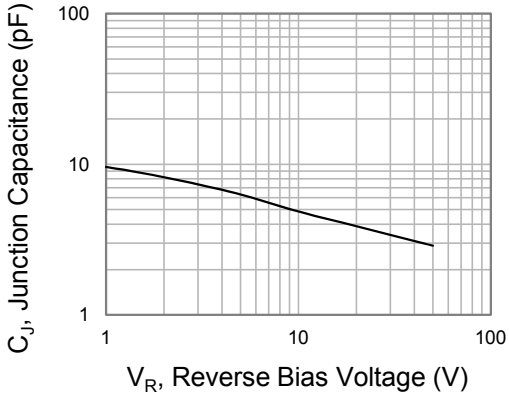

Fig.2 Typical Junction Capacitance

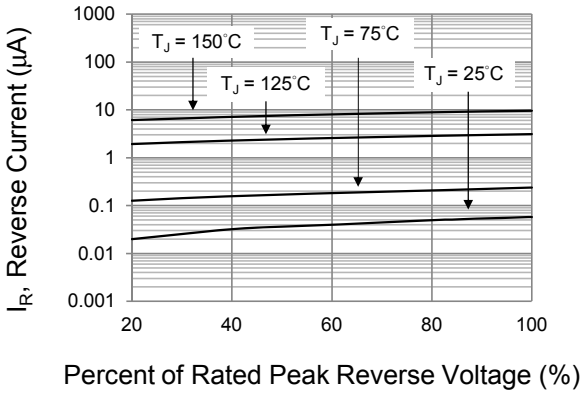

Fig.3 Typical Reverse Characteristics

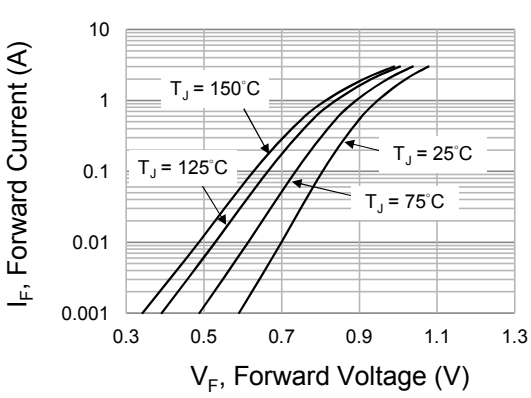

Fig.4 Typical Forward Characteristics

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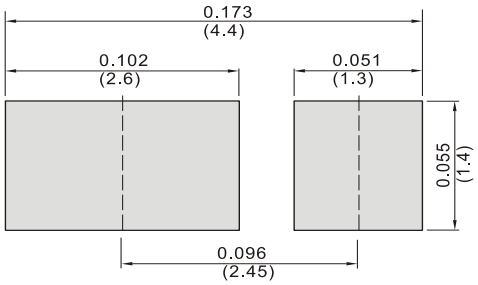
Product and Packing Information

Part No.	Package Type	Packing Type	Marking
GS1006HE-AU	SOD-123HE	3K pcs / 7” reel	H1J
GS1006HE-AU	SOD-123HE	10K pcs / 13” reel	H1J

Mounting Pad Layout

SOD-123HE Pad Layout Unit: inch(mm)



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