



# SB130AS

## SCHOTTKY BARRIER RECTIFIER

**Voltage**

**30 V**

**Current**

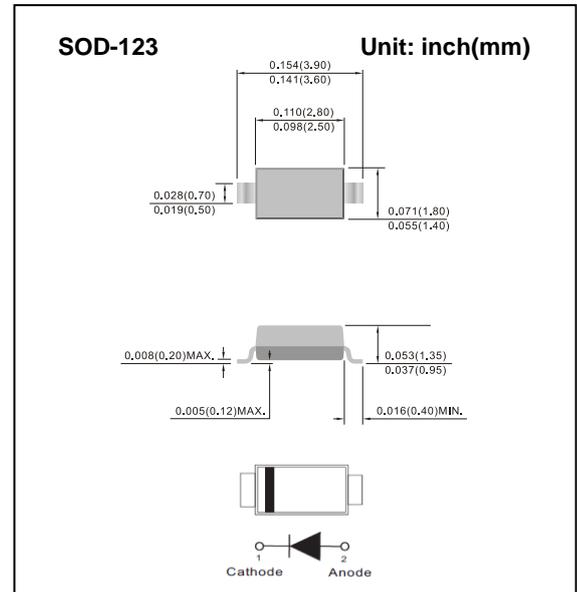
**1 A**

### Features

- Fast switching speed
- Surface mount package
- Lead free in compliance with EU RoHS2.0 (2011/65/EU & 2015/865/EU directive)
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### Mechanical Data

- Case: SOD-123 Molded Plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Weight: 0.00037 ounces, 0.01 grams
- Marking: GS



### Maximum Ratings And Electrical Characteristics (T<sub>A</sub>=25° C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNIT
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	30	V
Maximum rms voltage	V <sub>RMS</sub>	21	V
Maximum dc blocking voltage	V <sub>R</sub>	30	V
Maximum average forward rectified current	I <sub>F(AV)</sub>	1	A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	30	A
Maximum forward voltage at 1A	V <sub>F</sub>	0.48	V
Maximum dc reverse current at T <sub>J</sub> =25°C	I <sub>R</sub>	45	μA
Typical thermal resistance	(Note 2) R <sub>θJL</sub>	200	°C/W
	(Note 1) R <sub>θJA</sub>	380	
Maximum thermal resistance	(Note 1) R <sub>θJA</sub>	510	°C/W
Maximum power dissipation	(Note 1) P <sub>D</sub>	0.2	W
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +125	°C

Note : 1. Mounted on a FR4 PCB, single-sided copper, mini pad.

2. Mounted on FR-4 substrate 10cm x 10cm, 2 oz. copper, single-sided, pad layout 0.97 \* 1.22 mm



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## TYPICAL CHARACTERISTIC CURVES

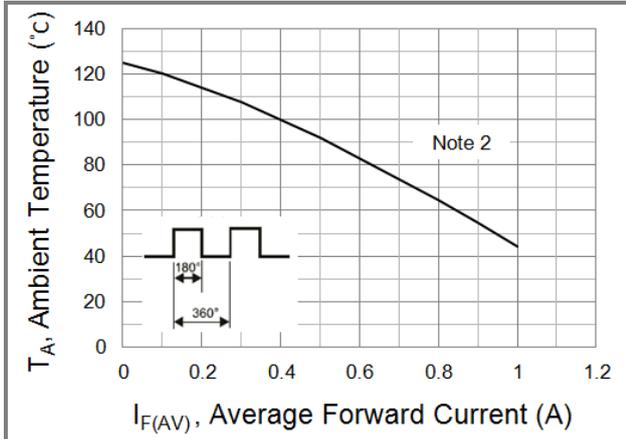


Fig.1 Forward Current Derating Curve

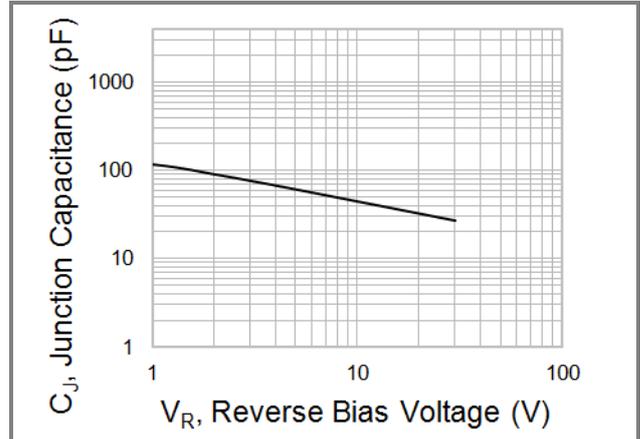


Fig.2 Typical Junction Capacitance

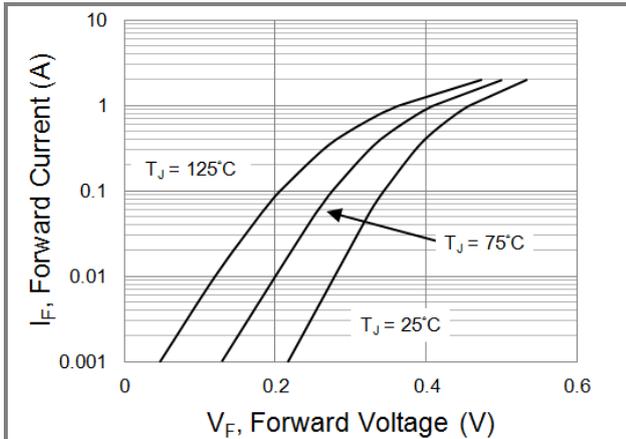


Fig.3 Typical Reverse Characteristics

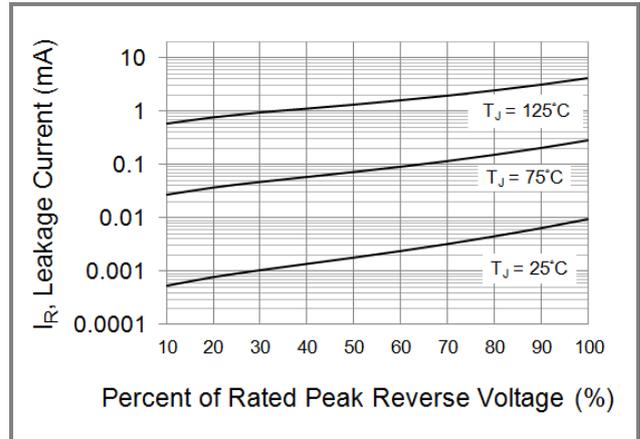


Fig.4 Typical Forward Characteristics

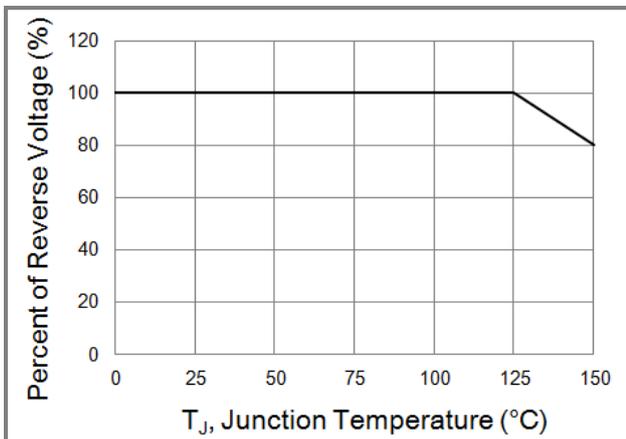


Fig.5 Operating Temperature Derating Curve

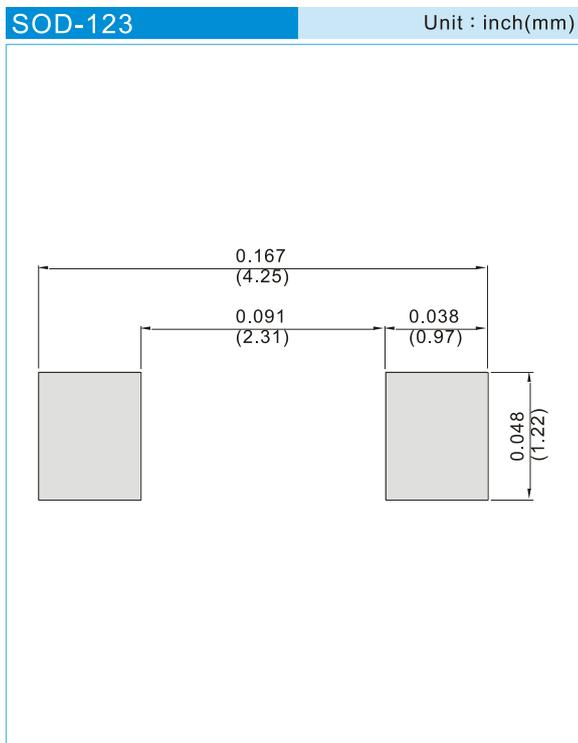


# SB130AS

## Part No Packing Code Version

Part No Packing Code	Package Type	Packing Type	Marking	Version
SB130AS_R1_00001	SOD-123	3K pcs / 7" reel	GS	Halogen free
SB130AS_R2_00001	SOD-123	10K pcs / 13" reel	GS	Halogen free

## Mounting Pad Layout





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