



# SS2040HE

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

**VOLTAGE** 40 Volts **CURRENT** 2 Amperes

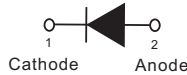
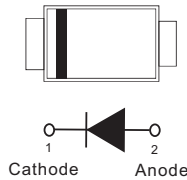
**SOD-123HE** Unit : inch(mm)

### FEATURES

- Fast switching speed
- Surface mount package ideally suited for automatic insertion
- Electrical identical standard JEDEC.
- High conductor
- Lead free in comply with EU RoHS 2002/95/EC directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### MECHANICAL DATA

- Case: SOD-123HE, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Apprx. Weight: 0.00015 ounces, 0.00424 grams
- Polarity: Color band denotes cathode end
- Marking: EY



### ABSOLUTE MAXIMUM RATINGS (TA=25°C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNITS
Reverse Voltage	$V_R$	40	V
Peak Reverse Voltage	$V_{RRM}$	40	V
Average Rectified Current at Temp=75°C	$I_O$	2	A
Peak Forward Surge Current:8.3ms single half sine-wave superimposed on rated load(JEDEC method)	$I_{FSM}$	50	A
Typical Thermal Resistance, Junction to Ambient (Note 1) Junction to Case (Note 1)	$R_{\theta JA}$ $R_{\theta JC}$	225 20	°C/W
Operating Junction Temperature and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150	°C

### ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

PARAMETER	SYMBOL	Test Condition	MIN.	TYP.	MAX.	UNITS
Reverse Breakdown Voltage	$V_{(BR)}$	$I_R=1mA$	40	--	--	V
Reverse Current	$I_R$	$V_R=40V$	--	--	100	μA
Forward Voltage	$V_F$	$I_F=2.0A$	--	0.5	0.55	V
Typical Junction Capacitance	$C_J$	$V_R=0V, f=1.0MHz$	--	300	--	pF

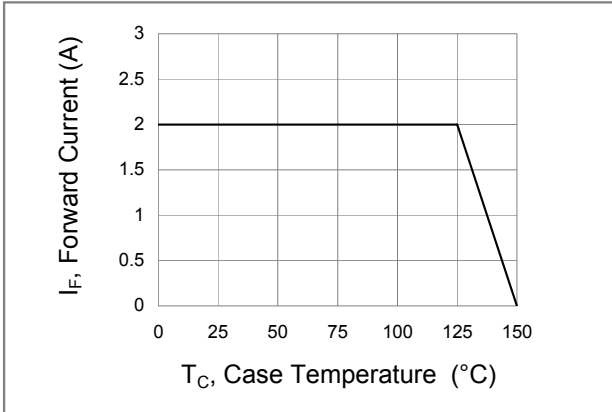
#### NOTES:

1. Mounted on 50cm<sup>2</sup> FR-4 PCB board.

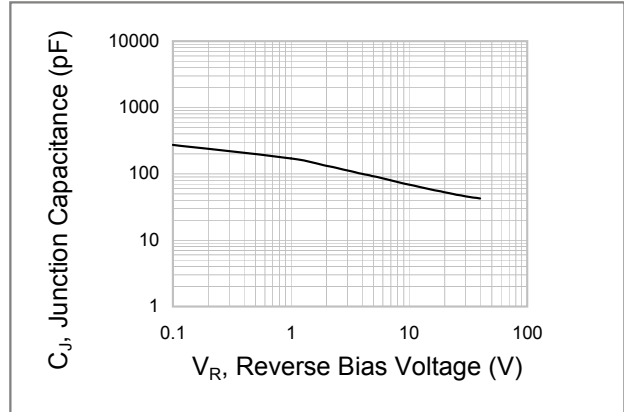


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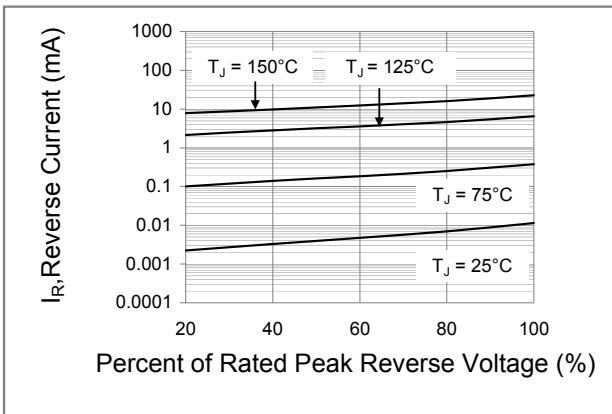
## RATING AND CHARACTERISTIC CURVES



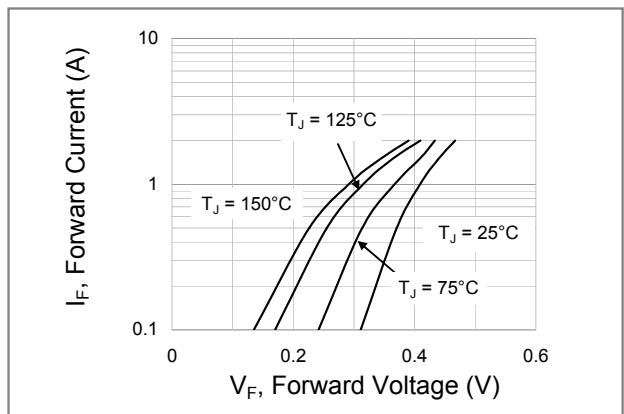
**Fig.1 Forward Current Derating Curve**



**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**

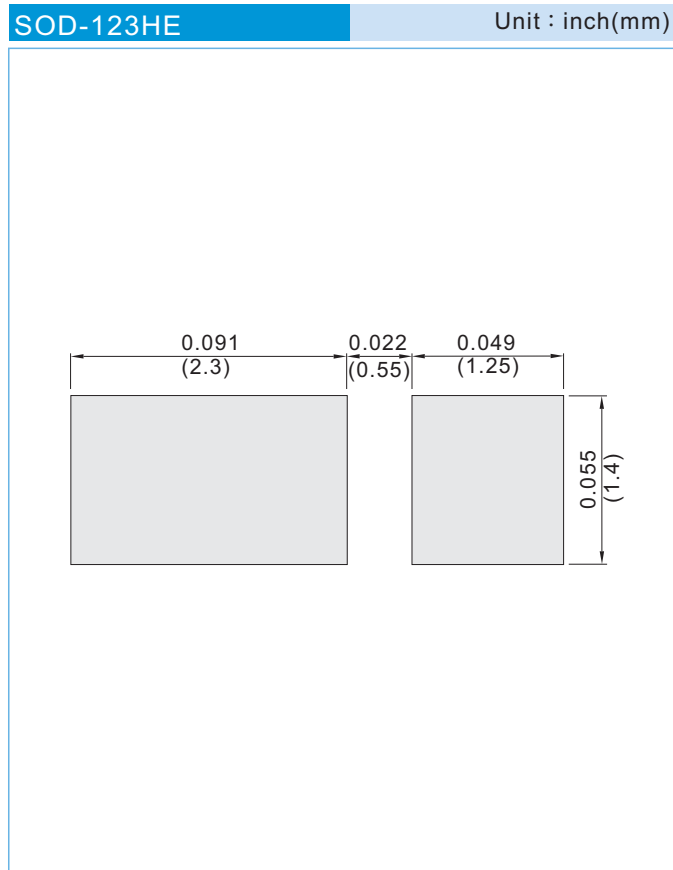


**Fig.4 Typical Forward Characteristics**



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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

- Packing information
  - T/R - 10K per 13" plastic Reel
  - T/R - 3K per 7" plastic Reel

## LEGAL STATEMENT

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