



# SS2040HE

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

**VOLTAGE** 40 Volt **CURRENT** 2 Ampere

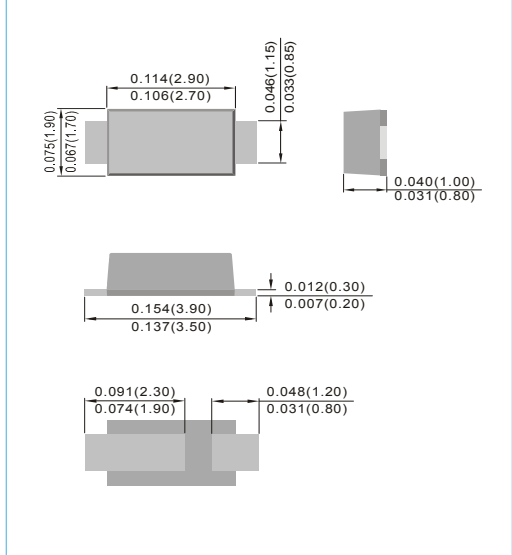
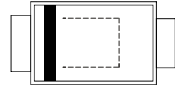
**SOD-123HE** Unit : inch(mm)

### FEATURES

- Fast switching speed
- Surface mount package ideally suited for automatic insertion
- Electrical identical standard JEDEC.
- High conductor
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### MECHANICAL DATA

- Case: SOD-123HE, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Apporx. Weight: 0.0006 ounces, 0.0184 grams
- Polarity: Color band denotes cathode end



### 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	$I_{FSM}$	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)

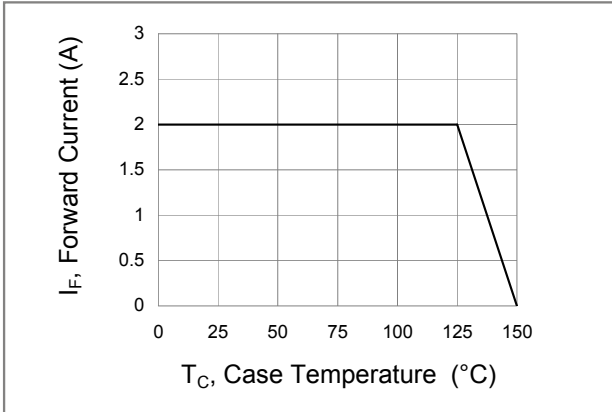
PARAMETER	SYMBOL	Test Condition	MIN.	TYP.	MAX.	UNITS
Reverse Breakdown Voltage	$V_{(BR)}$	$I_R=1mA$	40	--	--	V
Reverse Current	$I_R$	$V_R=40V$	--	--	100	μA
Forward Voltage	$V_F$	$I_F=2A$	--	0.5	0.55	V
Typical Junction Capacitance	$C_J$	$V_R=0V, f=1MHz$	--	300	--	pF

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

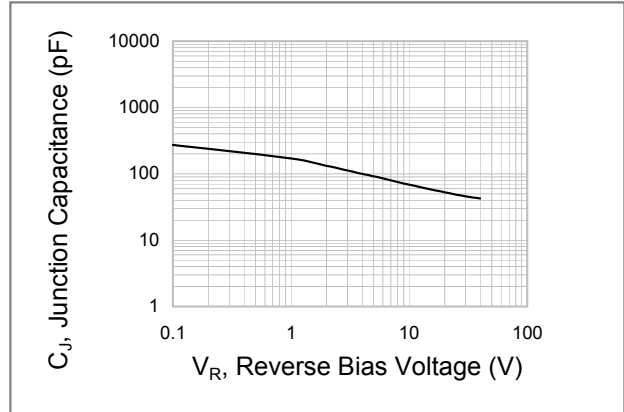


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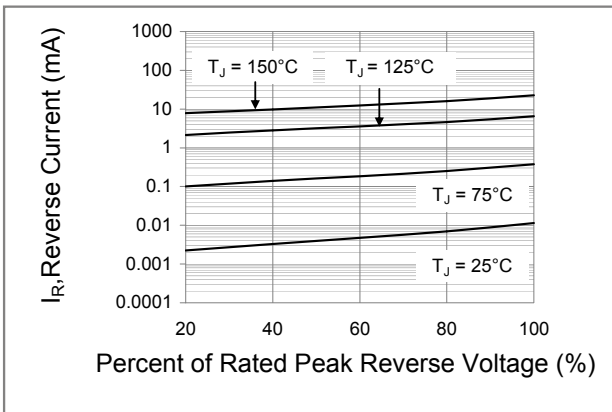
## RATING AND CHARACTERISTIC CURVES



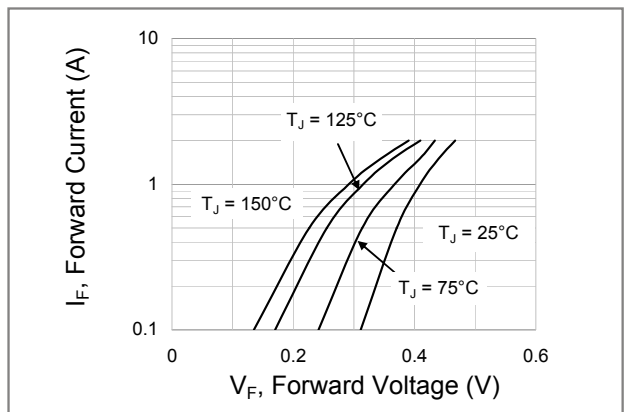
**Fig.1 Forward Current Derating Curve**



**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**



**Fig.4 Typical Forward Characteristics**



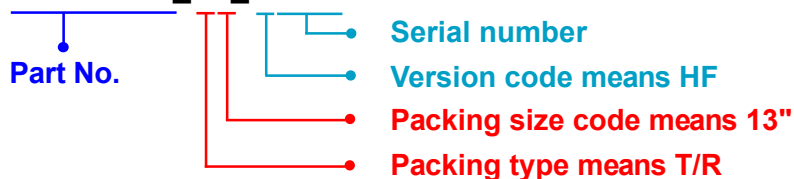
# SS2040HE

## PART NO PACKING CODE VERSION

Part No Packing Code	Package Type	Packing Type	Marking	Version
SS2040HE_R1_00001	SOD-123HE	3K pcs / 7" reel	EY	Halogen free
SS2040HE_R2_00001	SOD-123HE	10K pcs / 13" reel	EY	Halogen free

For example :

**RB500V-40\_R2\_00001**



Packing type	Packing Code <b>XX</b>			Version Code <b>XXXXX</b>		
	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	<b>A</b>	N/A	<b>0</b>	<b>HF</b>	<b>0</b>	serial number
Tape and Reel (T/R)	<b>R</b>	7"	<b>1</b>	<b>RoHS</b>	<b>1</b>	serial number
Bulk Packing (B/P)	<b>B</b>	13"	<b>2</b>			
Tube Packing (T/P)	<b>T</b>	26mm	<b>X</b>			
Tape and Reel (Right Oriented) (TRR)	<b>S</b>	52mm	<b>Y</b>			
Tape and Reel (Left Oriented) (TRL)	<b>L</b>	PANASERT T/B CATHODE UP (PBCU)	<b>U</b>			
FORMING	<b>F</b>	PANASERT T/B CATHODE DOWN (PBCD)	<b>D</b>			

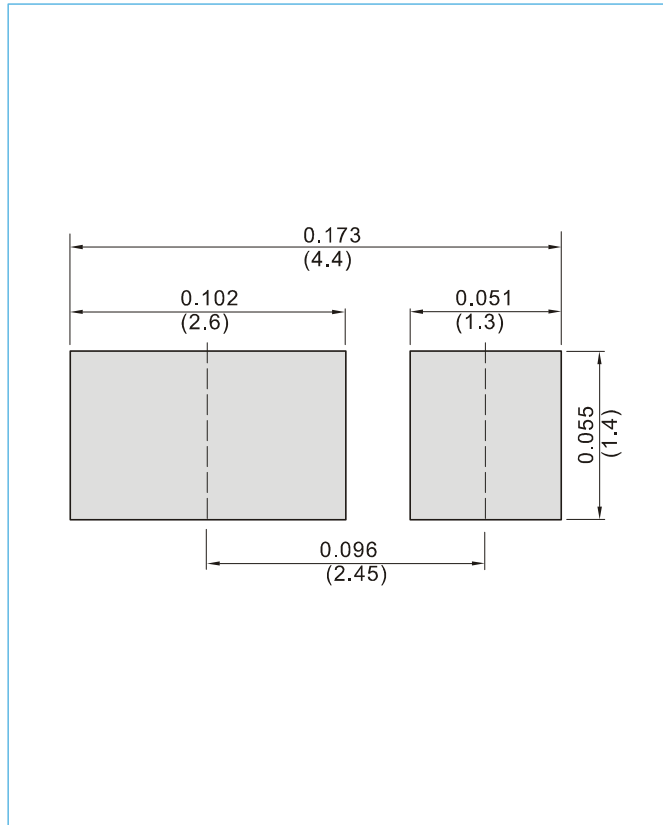


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## MOUNTING PAD LAYOUT

SOD-123HE

Unit : inch(mm)





## SS2040HE

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