



# SS1040HE SERIES

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

**VOLTAGE** 40-200Volt **CURRENT** 1 Ampere

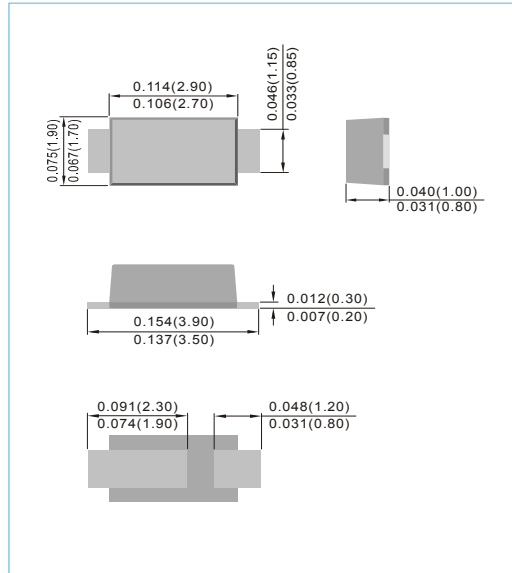
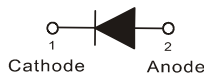
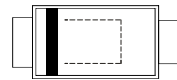
**SOD-123HE** Unit : inch(mm)

### 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 2.0
- Green molding compound as per IEC 61249 standard

### 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



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

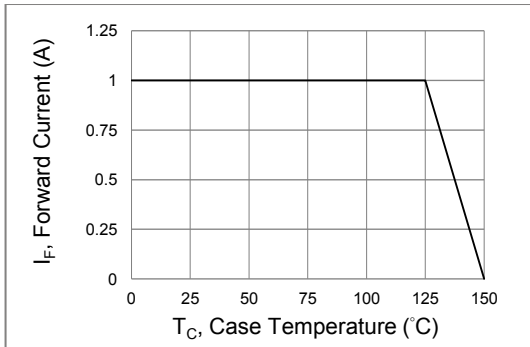
PARAMETER	SYMBOL	SS1040HE	SS1060HE	SS10100HE	SS10150HE	SS10200HE	UNITS	
Marking Code		EM	EN	EP	ERL	ES		
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	40	60	100	150	200	V	
Maximum RMS Voltage	V <sub>RMS</sub>	28	42	70	105	140	V	
Maximum DC Blocking Voltage	V <sub>R</sub>	40	60	100	150	200	V	
Maximum Average Forward Current	I <sub>O</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>	0.55	0.7	0.8	0.85		V	
Maximum DC Reverse Current	I <sub>R</sub>	30						μA
Typical Junction capacitance at V <sub>R</sub> =0V, f=1MHz	C <sub>J</sub>	155	125	100	85		pF	
Typical Thermal Resistance, Junction to Ambient (Note 2) Junction to Case (Note 1)	R <sub>θJA</sub> R <sub>θJC</sub>				185			°C/W
Operating Junction Temperature and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150						°C

**NOTES:**

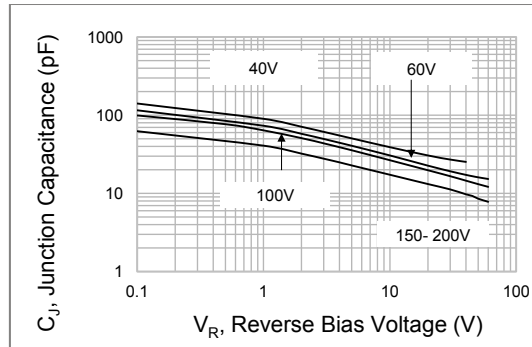
1. Mounted on a FR4 PCB, single-sided copper, with 100cm<sup>2</sup> copper pad area.
2. Mounted on a FR4 PCB, single-sided copper, mini pad.



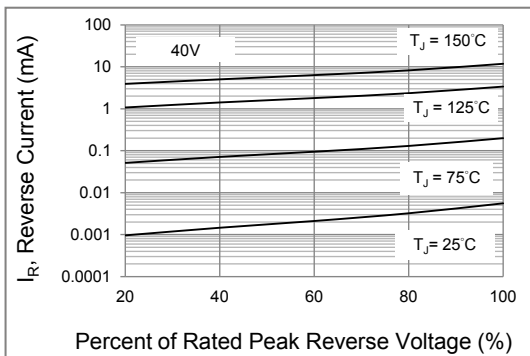
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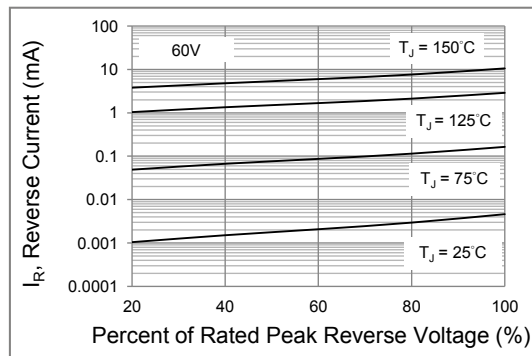
**Fig.1 Forward Current Derating Curve**



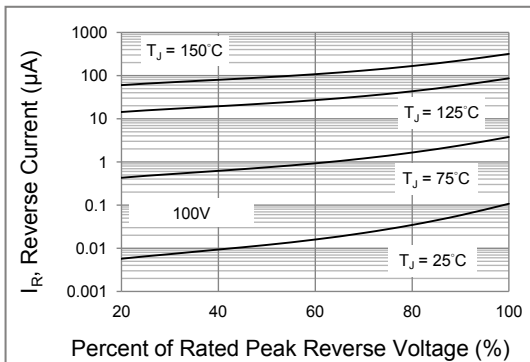
**Fig.2 Typical Junction Capacitance**



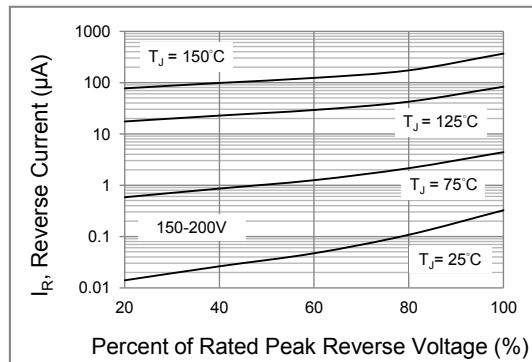
**Fig.3 Typical Reverse Characteristics**



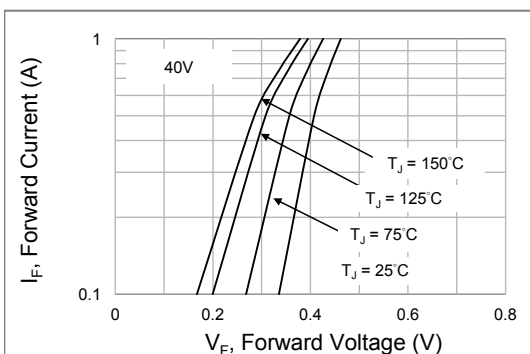
**Fig.4 Typical Reverse Characteristics**



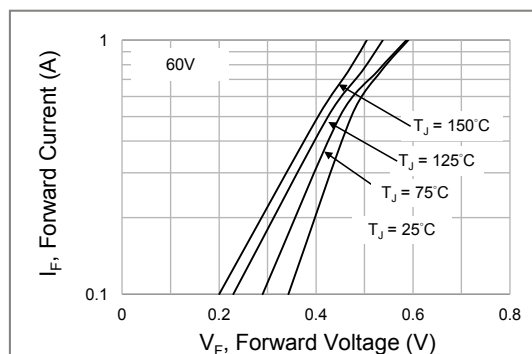
**Fig.5 Typical Reverse Characteristics**



**Fig.6 Typical Reverse Characteristics**



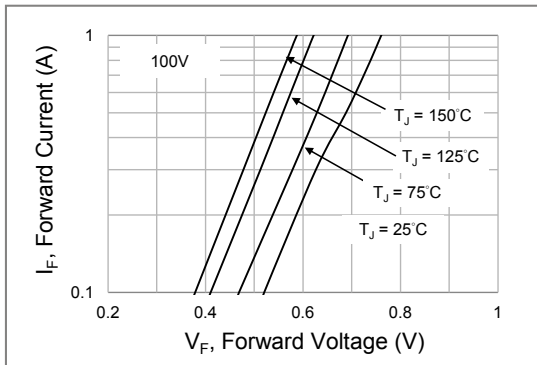
**Fig.7 Typical Forward Characteristics**



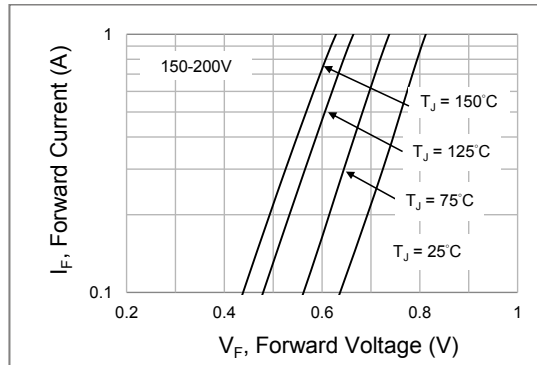
**Fig.8 Typical Forward Characteristics**



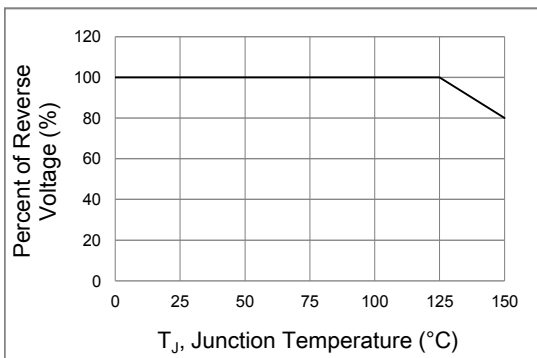
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**Fig.9 Typical Forward Characteristics**



**Fig.10 Typical Forward Characteristics**



**Fig.11 Operating Temperature Derating Curve**

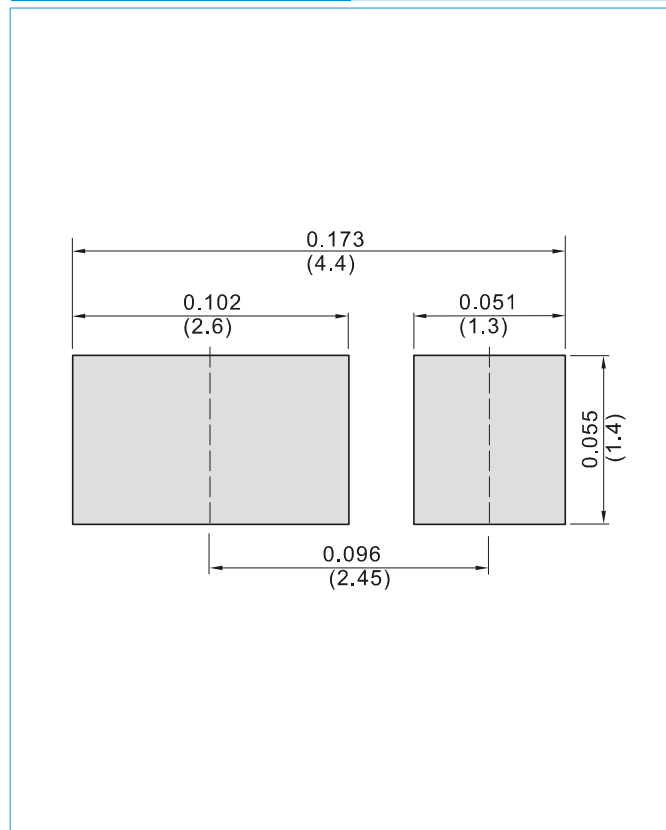


# SS1040HE SERIES

## MOUNTING PAD LAYOUT

SOD-123HE

Unit : inch(mm)



## ORDER INFORMATION

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



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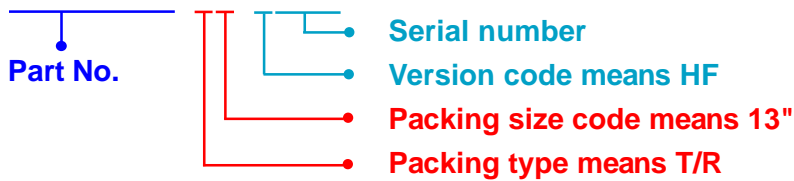
## Part No\_packing code\_Version

SS1040HE\_R1\_00001

SS1040HE\_R2\_00001

For example :

**RB500V-40\_R2\_00001**



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



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