



SS3020HE SERIES

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

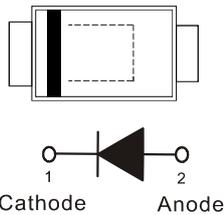
VOLTAGE 20~200 Volt **CURRENT** 3 Ampere

FEATURES

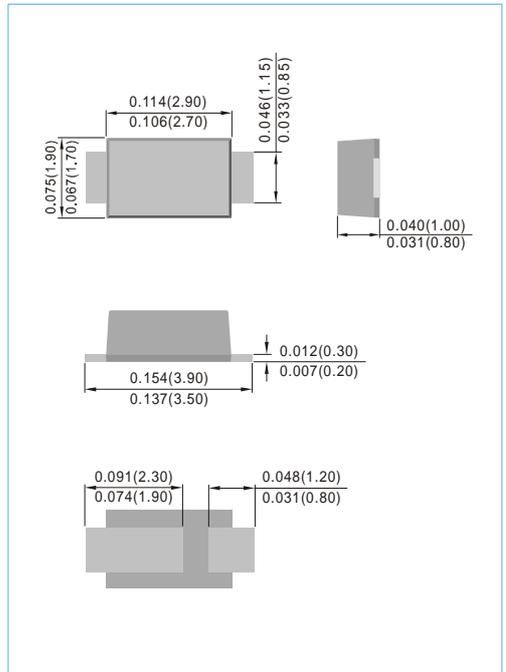
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications in order to optimize board space
- Low power loss,high efficiency
- High surge capacity
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: SOD-123HE molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750,Method 2026
- Polarity: Color band denotes cathode end
- Approx weight: 0.0006 ounces, 0.0184 grams



SOD-123HE Unit : inch(mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Resistive or inductive load.

PARAMETER	SYMBOL	SS3020-HE	SS3030-HE	SS3040-HE	SS3060-HE	SS30100-HE	SS30150-HE	SS30200-HE	UNITS
Marking Code	-	EA	EB	EC	ED	EF	EH	EJ	-
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	60	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	21	28	42	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	60	100	150	200	V
Maximum Average Forward Current	$I_{F(AV)}$	3							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	80							A
Maximum Forward Voltage at 3A (Note 1)	V_F	0.52		0.65	0.8	0.86	0.86	V	
Maximum DC Reverse Current $T_J=25^\circ\text{C}$	I_R	160		100	20	20	20	μA	
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$ $R_{\theta JA}$	20 105							$^\circ\text{C} / \text{W}$
Operating Junction Temperature Range	T_J	-55 to +125			-55 to +150				$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +125			-55 to +150				$^\circ\text{C}$

NOTES :

1. Pulse Test with PW =300 μsec , 1% Duty Cycle.
2. Mounted on 50cm² FR-4 PCB Board



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RATING AND CHARACTERISTIC CURVES

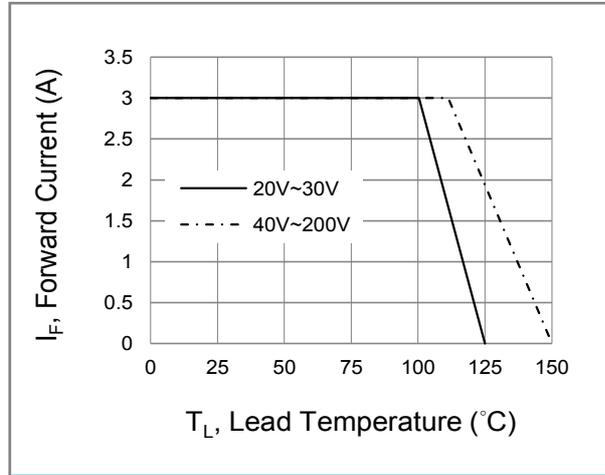


Fig.1 FORWARD CURRENT DERATING CURVE

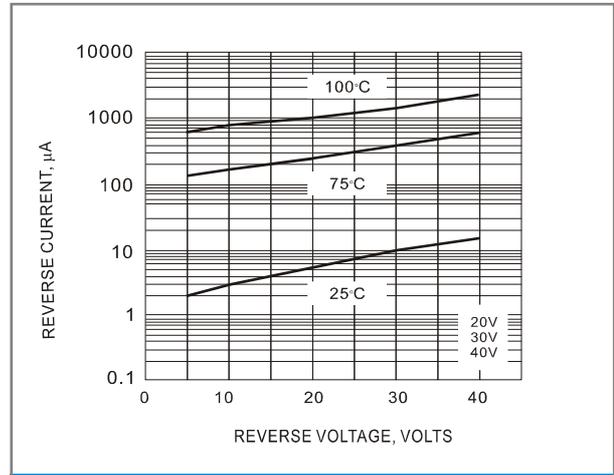


Fig.2 TYPICAL REVERSE CHARACTERISTICS

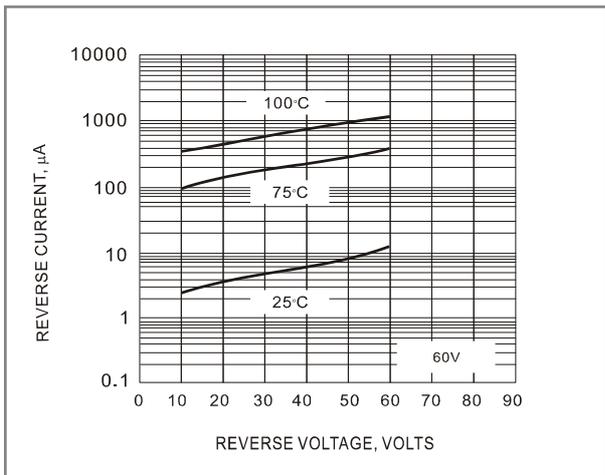


Fig.3 TYPICAL REVERSE CHARACTERISTICS

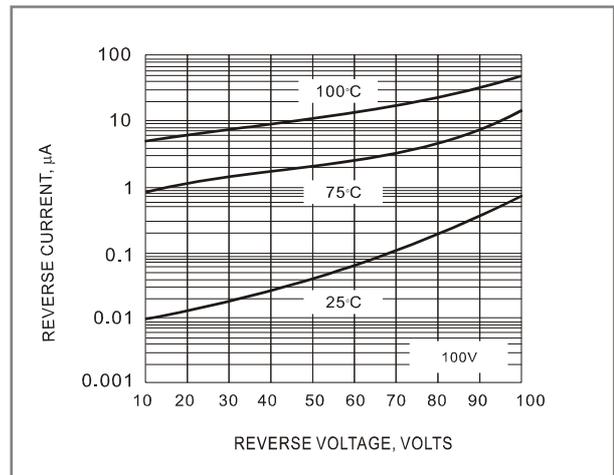


Fig.4 TYPICAL REVERSE CHARACTERISTICS

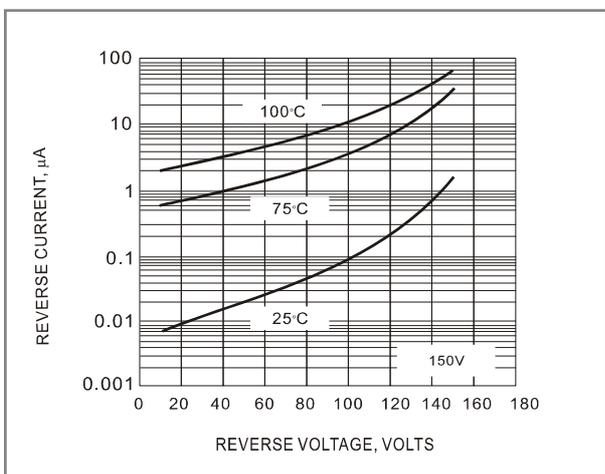


Fig.5 TYPICAL REVERSE CHARACTERISTICS

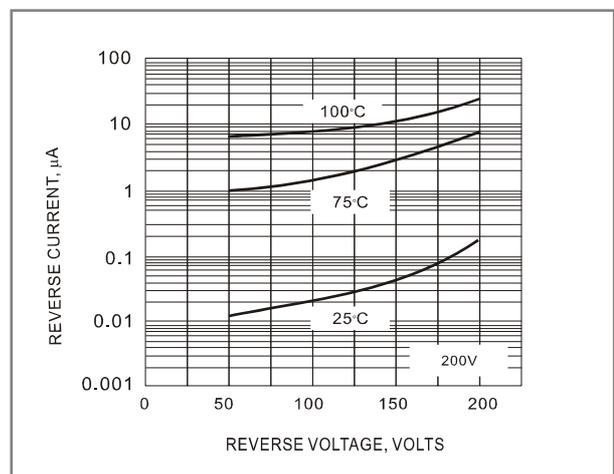


Fig.6 TYPICAL REVERSE CHARACTERISTICS



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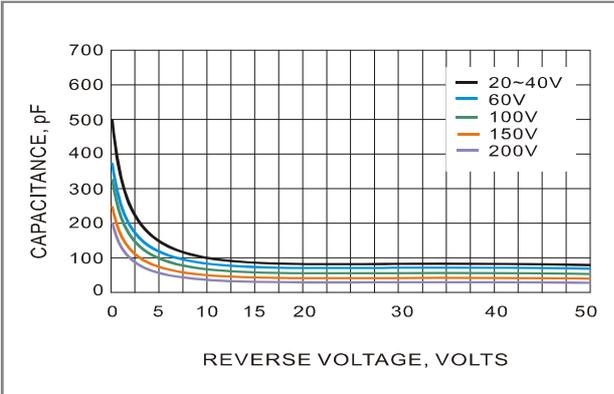


Fig.7 TYPICAL JUNCTION CAPACITANCE

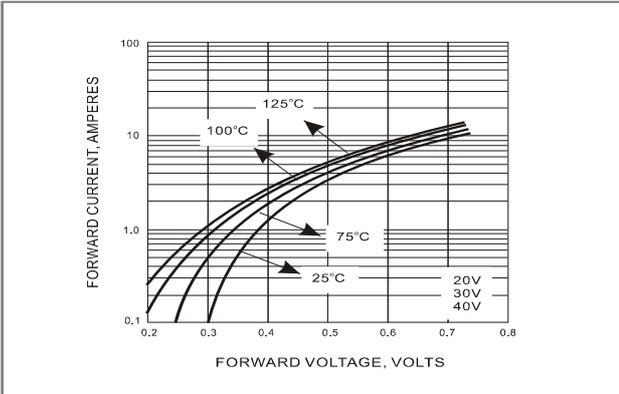


Fig.8 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

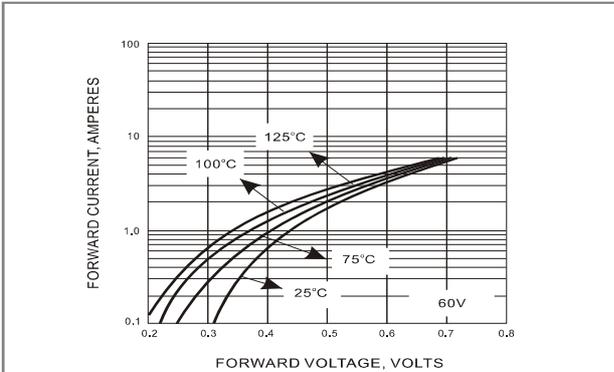


Fig.9 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

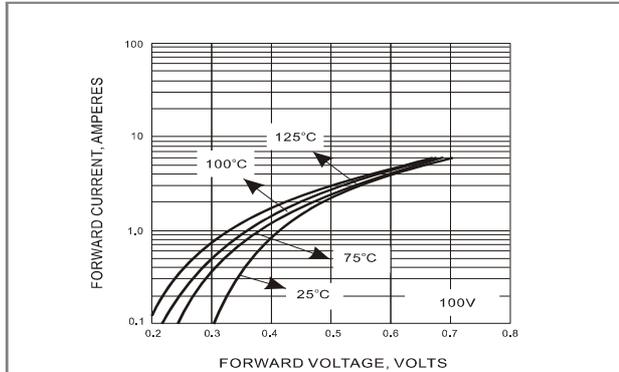


Fig.10 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

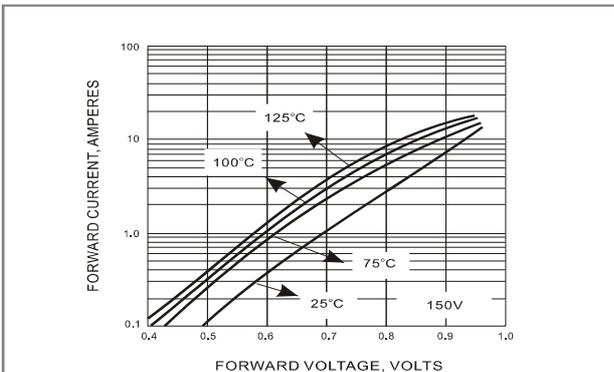


Fig.11 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

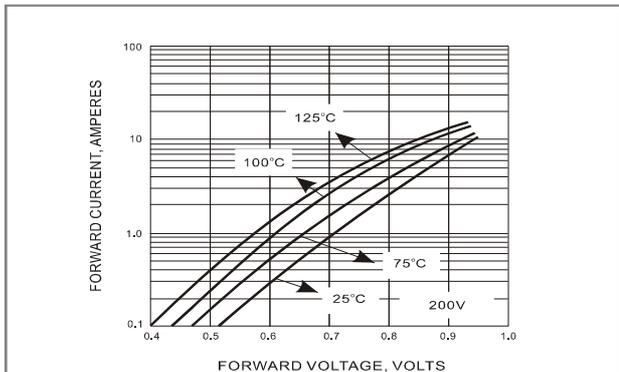


Fig.12 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

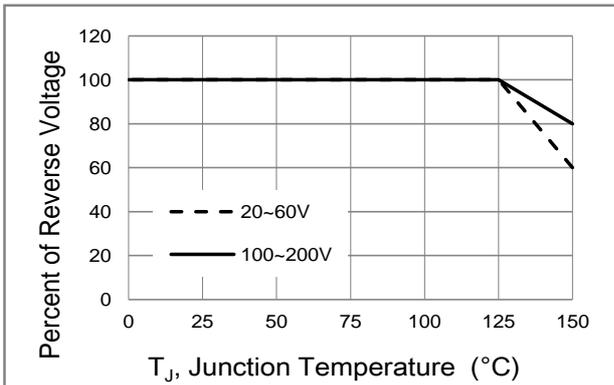
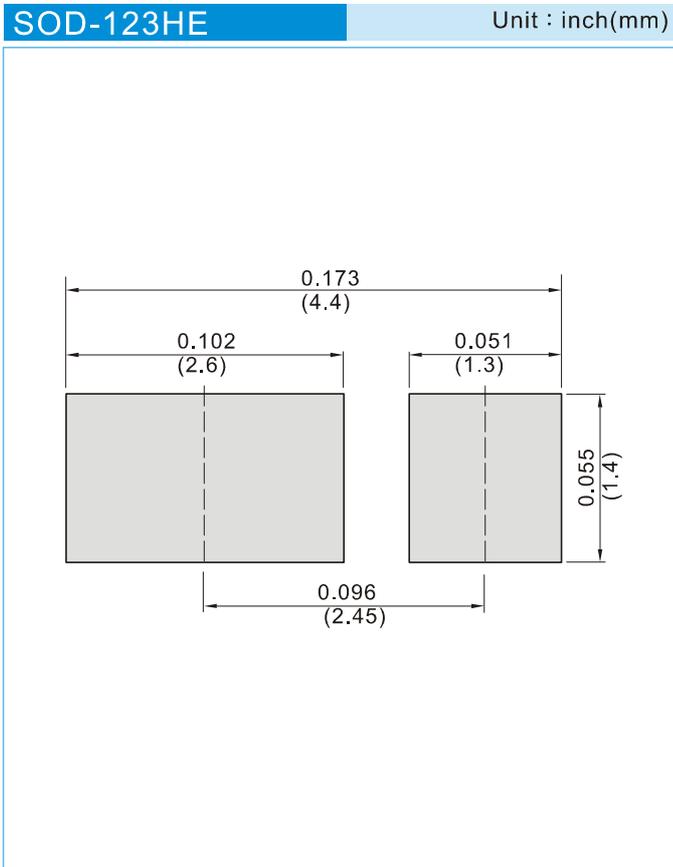


Fig. %' Operating Temperature Derating



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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



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Part No_packing code_Version

SS3020HE_R1_00001

SS3020HE_R2_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th 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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