



# SS1040

## SURFACE MOUNT SCHOTTKY BARRIER

**VOLTAGE** 40 Volt **CURRENT** 1 Amper

**SOD-123** 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

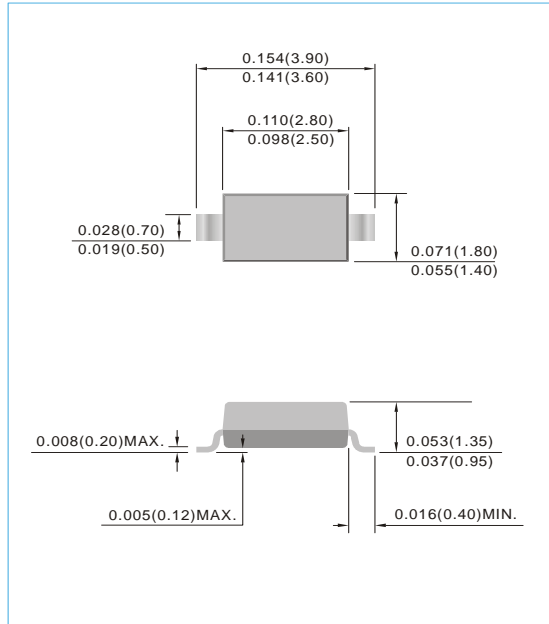
Case: SOD-123, Plastic

Terminals: Solderable per MIL-STD-750, Method 2026

Approx. Weight: 0.0004 ounces, 0.01 grams

Polarity: Color band denotes cathode end

Marking: G5



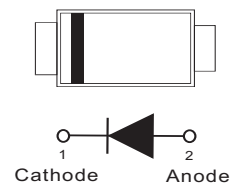
### ABSOLUTE RATINGS

Parameter	Symbol	Value	Units
Reverse Voltage	$V_R$	40	V
Peak Reverse Voltage	$V_{RRM}$	40	V
Average Rectified Current at $T_L=75^\circ\text{C}$	$I_{F(AV)}$	1	A
Non-repetitive Peak Forward Surge Current at $t=8.3\text{ms}$	$I_{FSM}$	30	A

### THERMAL CHARACTERISTICS

Parameter	Symbol	Value	Units
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	380	$^\circ\text{C/W}$
Junction Temperature	$T_J$	125	$^\circ\text{C}$
Storage Temperature at $\text{Temp}=25^\circ\text{C}$	$T_{STG}$	-55 to 150	$^\circ\text{C}$

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





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## ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Units
Reverse Breakdown Voltage	$V_{(BR)}$	$I_R=500 \mu A$	40	--	--	V
Reverse Current	$I_R$	$V_R=40 V$	--	--	500	$\mu A$
Forward Voltage	$V_F$	$I_F=1A$	--	--	0.55	V
Diode Capacitance	$C_T$	$V_R=0V, f=1MHz$	--	--	230	pF

### RATING AND CHARACTERISTIC CURVES

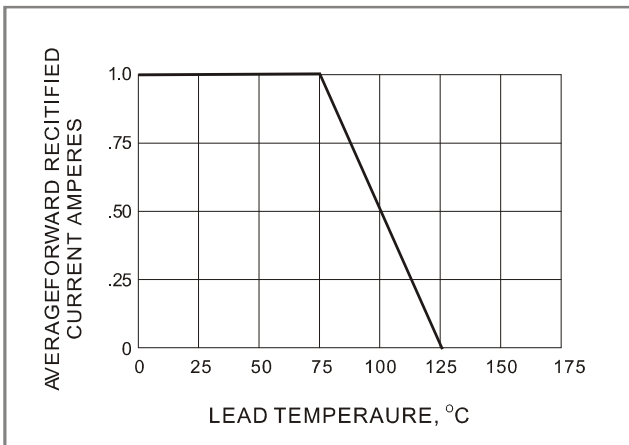


Fig.1- FORWARD CURRENT DERATING CURVE

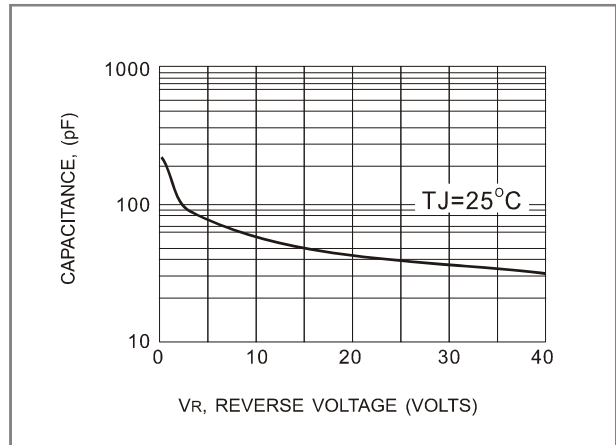


Fig.2- TYPICAL JUNCTION CHARACTERISTIC

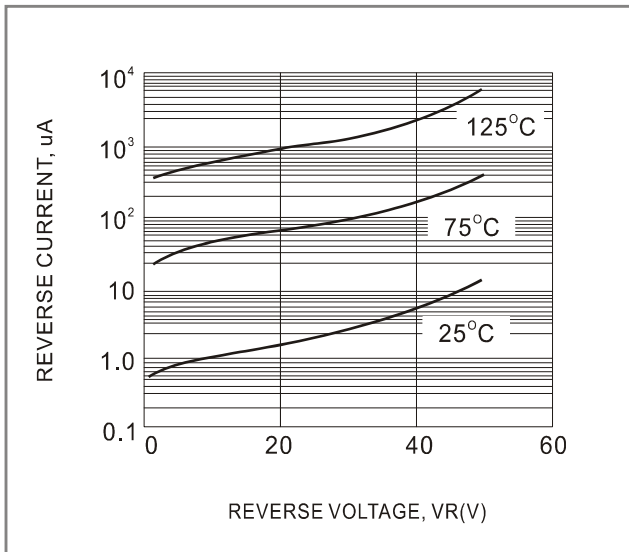


Fig.3- TYPICAL REVERSE CHARACTERISTIC

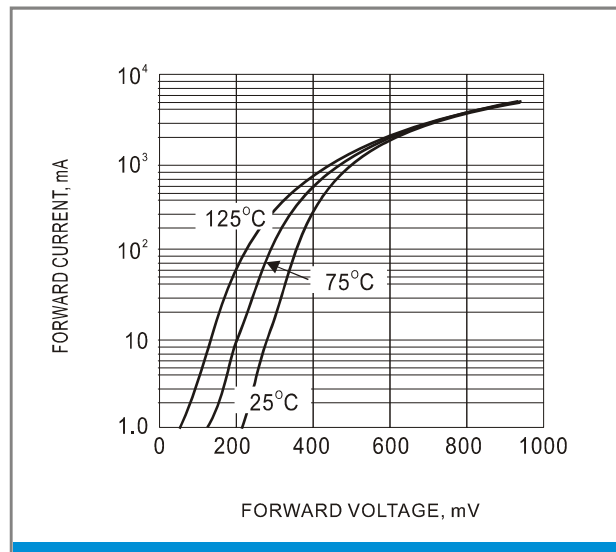


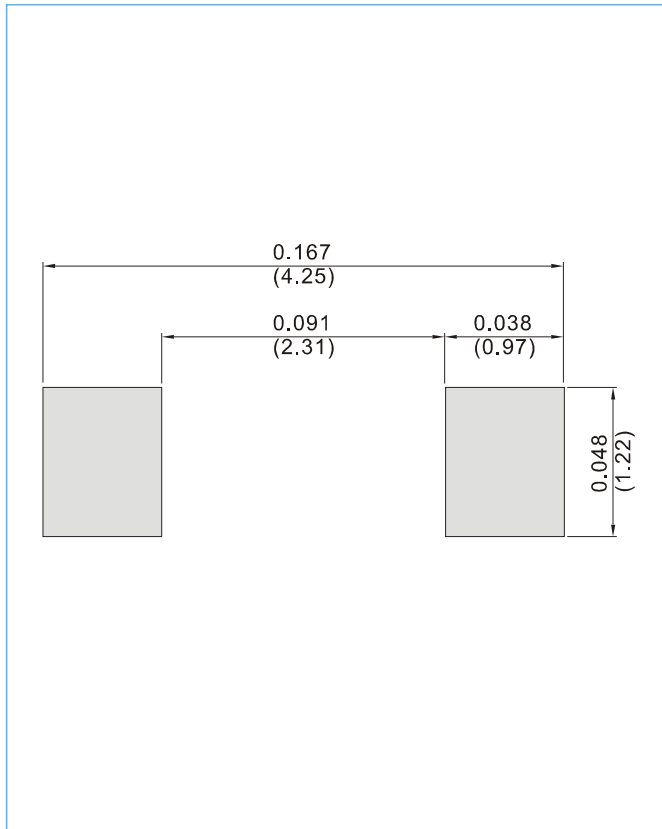
Fig.4- TYPICAL FORWARD CHARACTERISTIC



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## MOUNTING PAD LAYOUT

SOD-123 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

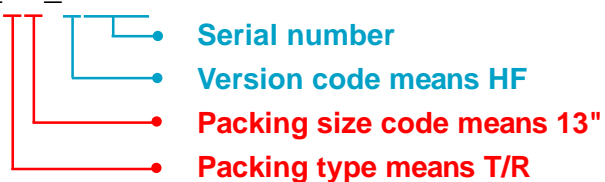
SS1040\_R1\_00001

SS1040\_R2\_00001

For example :

**RB500V-40** **R2** **00001**

Part No.



Packing Code XX				Version Code XXXXX		
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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