



# SD103AW~SD103CW

## SURFACE MOUNT SCHOTTKY BARRIER

**VOLTAGE** 20 to 40 Volt    **CURRENT** 0.35 Ampere

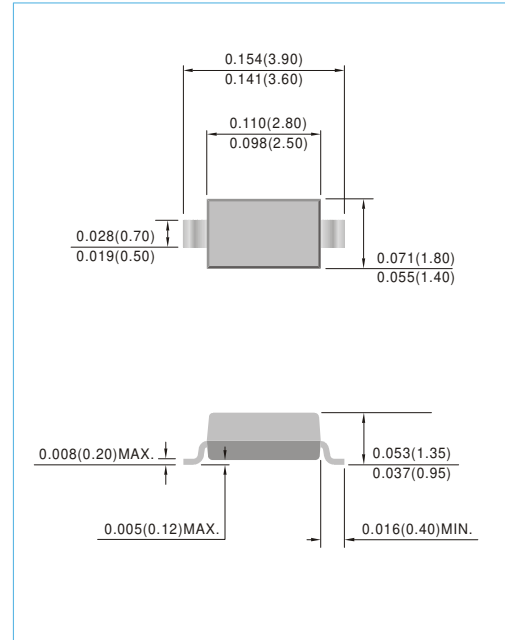
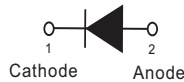
**SOD-123**    Unit : inch(mm)

### FEATURES

- Low turn-on voltage
- Fast switching
- PN Junction Guard Ring for Transient and ESD Protection.
- 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 cathode



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

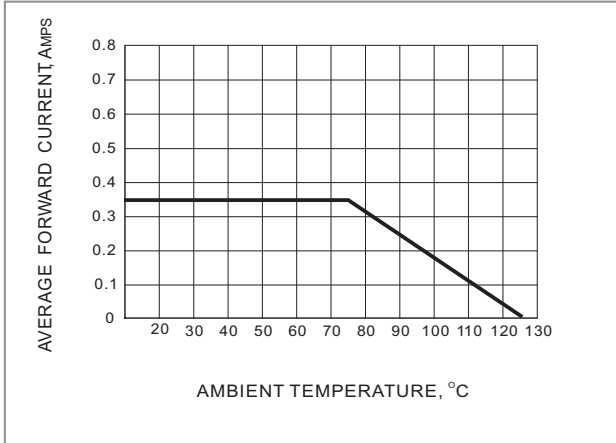
Ratings at 25°C ambient temperature unless otherwise specified. For capacitive load, derate current by 20%.

Parameter	Symbol	SD103AW	SD103BW	SD103CW	Units
Marking Code	-	S6	S7	S8	-
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	40	30	20	V
Maximum RMS Voltage	$V_{RMS}$	28	21	14	V
Maximum DC Blocking Voltage	$V_{DC}$	40	30	20	V
Maximum Average Forward Current at $T_A=75^\circ\text{C}$	$I_{F(AV)}$	0.35			A
Peak Forward Surge Current at 10 $\mu\text{s}$	$I_{FSM}$	2			A
Maximum Instantaneous Forward Voltage	$V_F$	0.37@0.02A 0.6@0.2A			V
Maximum Reverse Current	$I_R$	5@30V	5@20V	5@10V	$\mu\text{A}$
Typical Junction Capacitance at $V_R=0\text{V}$	$C_J$	50			pF
Maximum Thermal Resistance	$R_{\theta JA}$	300			$^\circ\text{C} / \text{W}$
Operating Junction and Storage Temperature Range	$T_J$	-55 to +125			$^\circ\text{C}$

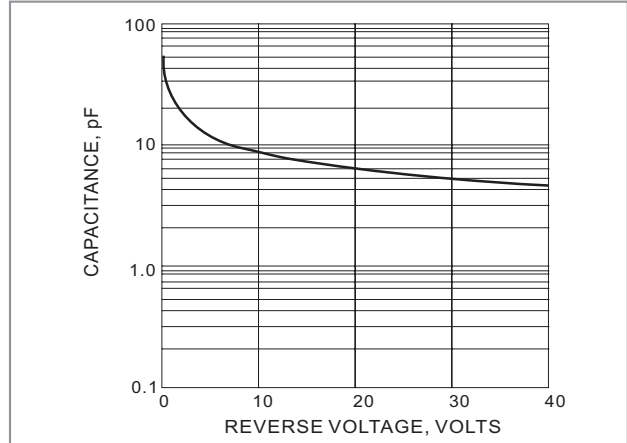


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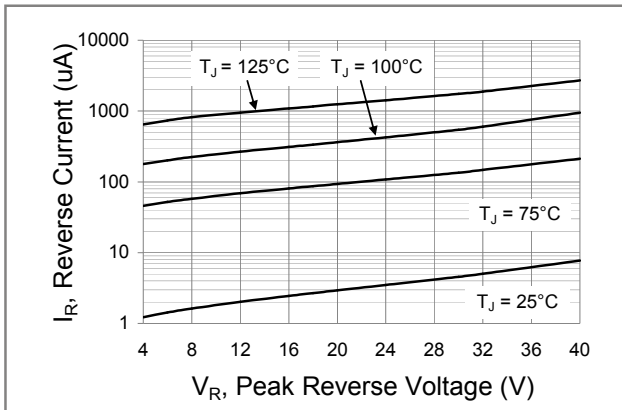
## RATING AND CHARACTERISTIC CURVES



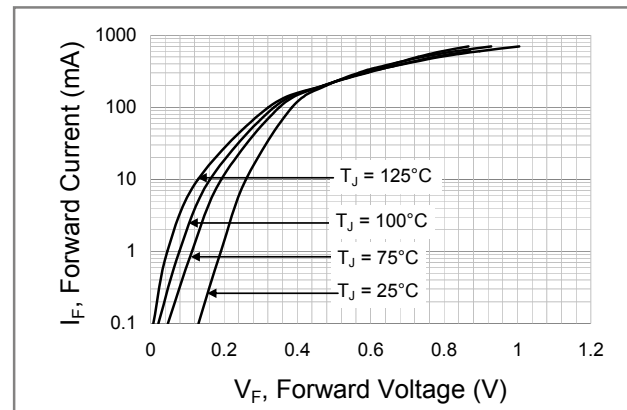
**Fig.1 FORWARD CURRENT DERATING CURVE**



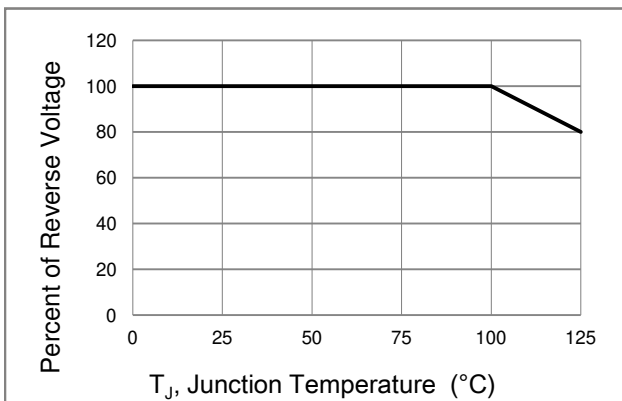
**Fig.2 TYPICAL JUNCTION CAPACITANCE**



**Fig.3 Typical Reverse Characteristics**



**Fig.4 Typical Forward Characteristics**

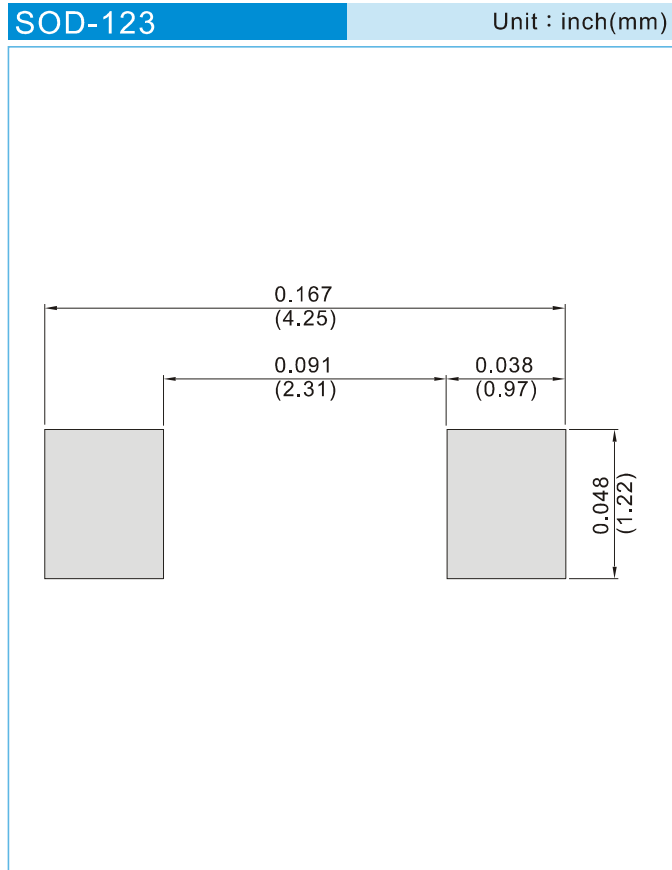


**Fig.5 Operating Temperature Derating Curve**



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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

SD103AW\_R1\_00001

SD103AW\_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)	<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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