

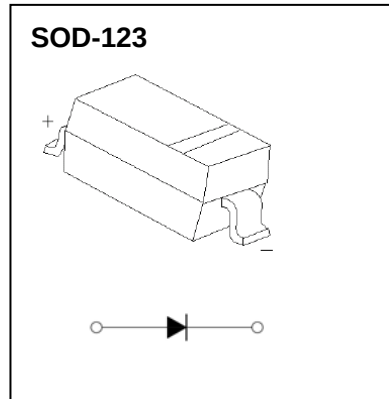


SOD-123 Plastic-Encapsulate Diodes

SCHOTTKY BARRIER DIODE

FEATURES

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Negligible Reverse Recovery Time
- Low Capacitance
- **Pb-Free package is available**
RoHS product for packing code suffix "G"
Halogen free product for packing code suffix "H"
- **Moisture Sensitivity Level 1**
- **Polarity:** Color band denotes cathode end



MARKING: SD103AW:S4

SD103BW:S5

SD103CW:S6

MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value			Unit
		SD103AW	SD103BW	SD103CW	
V_{RRM}	Peak Repetitive Reverse Voltage	40	30	20	V
V_{RWM}	Working Peak Reverse Voltage				
$V_{R(RMS)}$	RMS Reverse Voltage	28	21	14	V
I_{FM}	Forward Continuous Current	350			mA
I_{FSM}	Non-repetitive Peak Forward Surge Current @ $t \leq 1s$	2			A
P_D	Power Dissipation	400			mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	250			$^{\circ}\text{C}/\text{W}$
T_j	Operating Temperature	$-55 \sim +125$			$^{\circ}\text{C}$
T_{stg}	Storage Temperature	$-55 \sim +150$			$^{\circ}\text{C}$

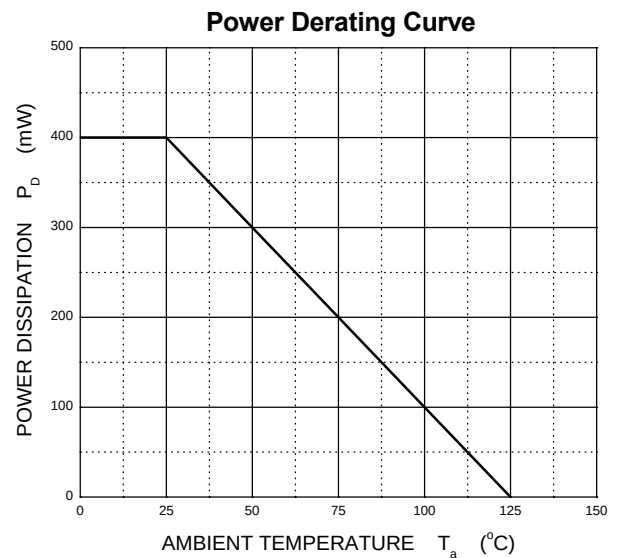
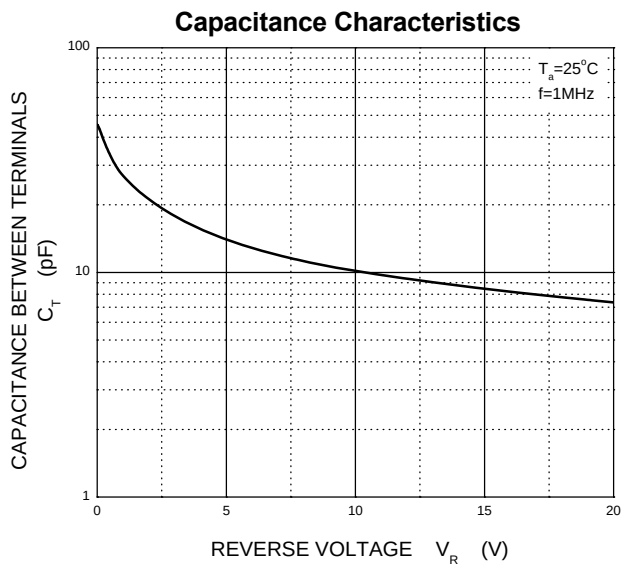
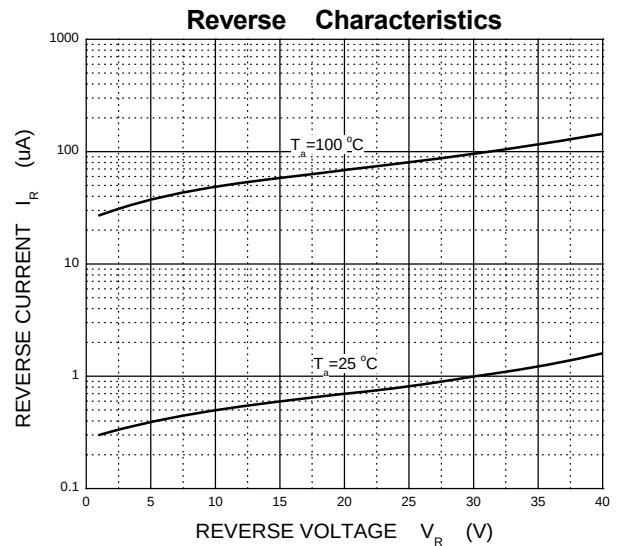
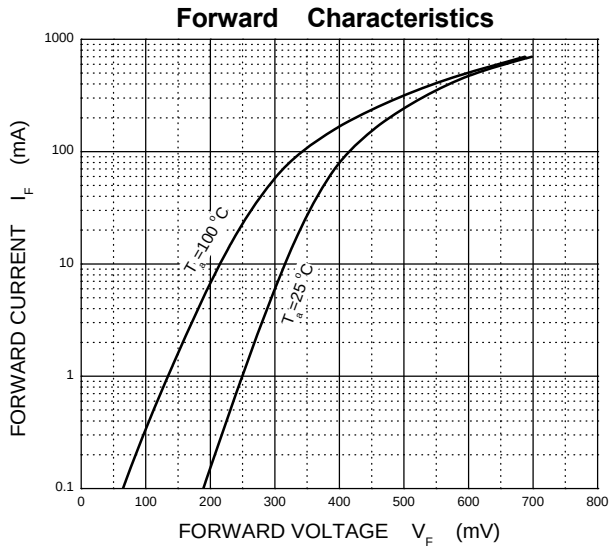
ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$ SD103AW	40			V
		SD103BW	30			
		SD103CW	20			
Reverse current	I_R	$V_R=30\text{V}$ SD103AW			5	μA
		$V_R=20\text{V}$ SD103BW				
		$V_R=10\text{V}$ SD103CW				
Forward voltage	V_F	$I_F=20\text{mA}$			0.37	V
		$I_F=200\text{mA}$			0.6	
Total capacitance	C_{tot}	$V_R=0\text{V}, f=1\text{MHz}$		50		pF
Reverse recovery time	t_{rr}	$I_F=I_R=200\text{mA}, I_{rr}=0.1 \times I_R, R_L=100\Omega$		10		ns



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Typical Characteristics

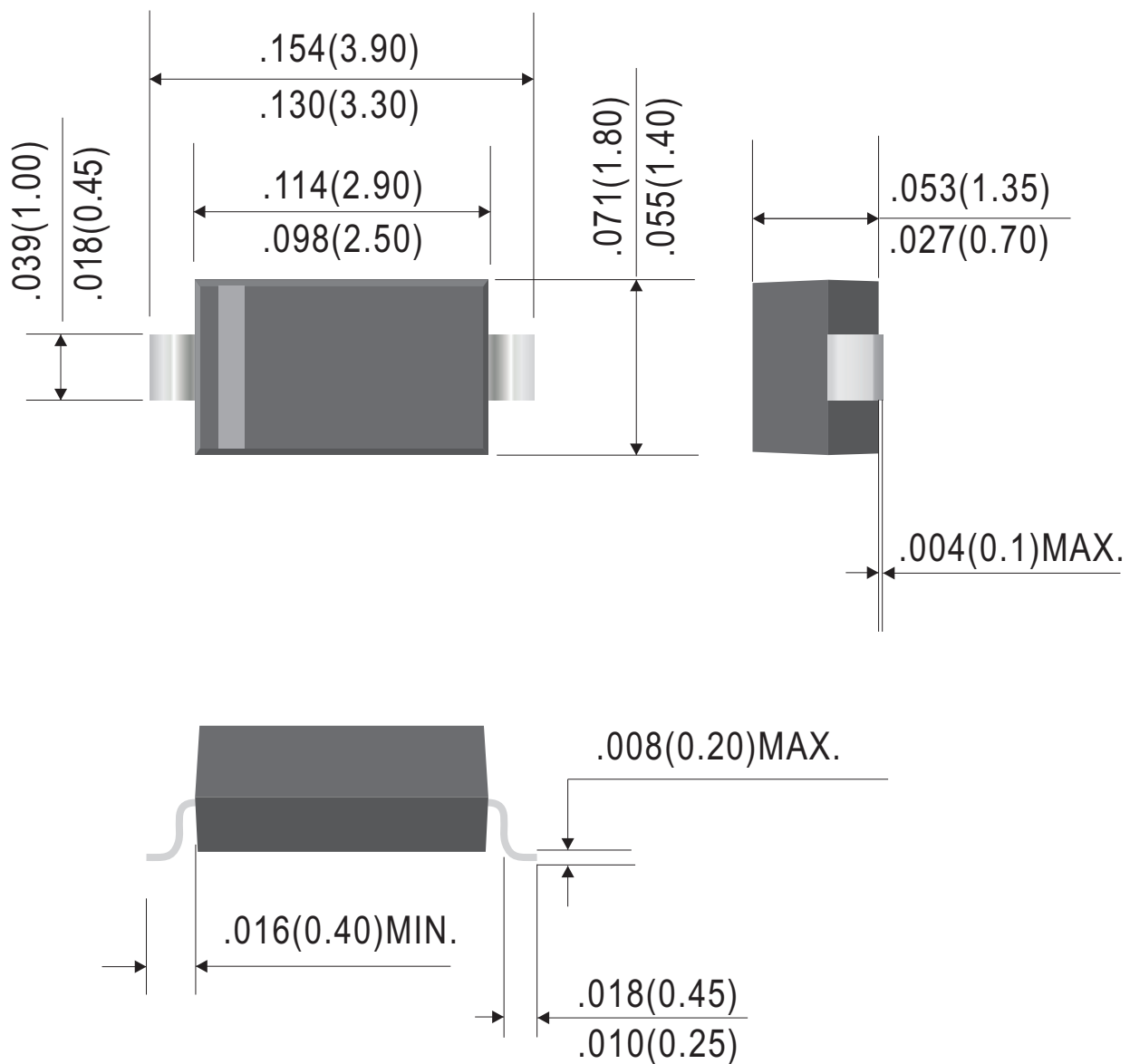




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Outline Drawing

SOD-123



Dimensions in inches and (millimeters)

Rev.D



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Ordering Information:

Device PN	Packing
Part Number -T ⁽¹⁾ G ⁽²⁾ -WS	Tape&Reel: 3 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

Disclaimer

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