

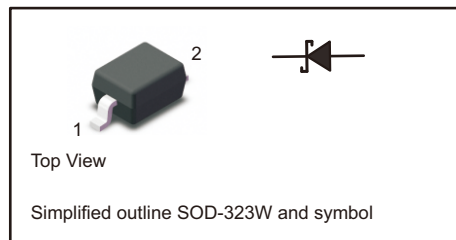
Schottky Barrier Diode

FEATURES

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Negligible Reverse Recovery Time
- Low Capacitance

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



MECHANICAL DATA

- Case: SOD-323W
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 5.48mg / 0.00019oz

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	SD103AWS	SD103BWS	SD103CWS	Units
Peak Repetitive Reverse Voltage	V_{RRM}	40	30	20	V
RMS reverse voltage	V_{RMS}	28	21	14	V
Working Peak Reverse Voltage	V_{DC}	40	30	20	V
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	2			A
Maximum Instantaneous Forward Voltage	V_F	$I_F=20mA$	0.37		V
		$I_F=200mA$	0.60		
Power Dissipation	P_D	200			mW
Reverse current	I_R	SD103AWS, $V_R=25V$	1	–	uA
		SD103BWS, $V_R=20V$	–	1	
		SD103CWS, $V_R=10V$	–	–	
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	300			°C/W
Reverse voltage	$V_{(BR)R}$	SD103AWS	40		V
		SD103BWS	30		
		SD103CWS	20		
Reverse recovery time	t_{rr}	$I_F=I_R=200mA, I_{rr}=0.1 \times I_R, R_L=100\Omega$	10		ns
Forward Continuous Current	I_{FM}	350			mA
Total capacitance	C_{tot}	$V_R=0V, f=1MHz$	50		pF
Junction temperature	T_j	125			°C
Storage temperature	T_{stg}	-55 ~ +150			°C



Fig.1 Power Derating Curve

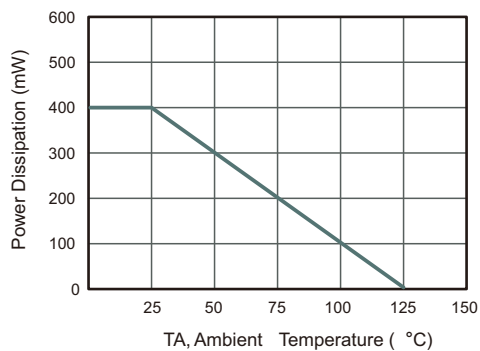


Fig.2 Typical Reverse Characteristics

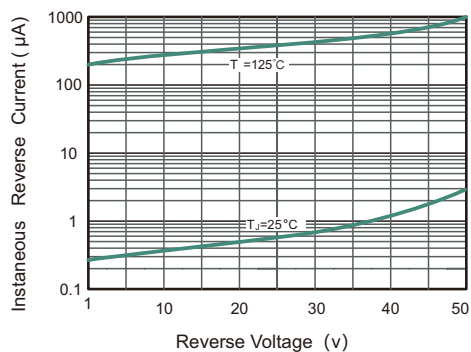


Fig.3 Forward Characteristics

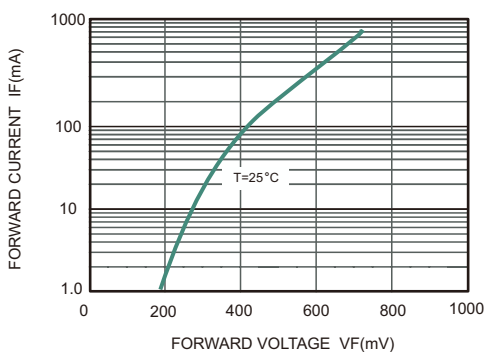


Fig.4 Typical Transient Thermal Impedance

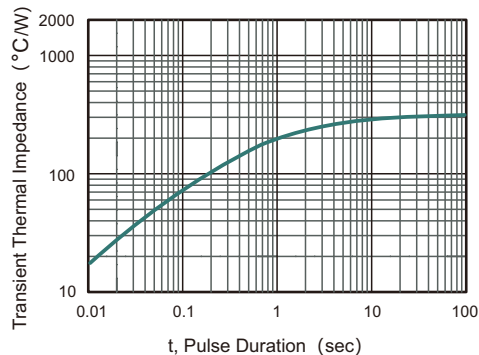
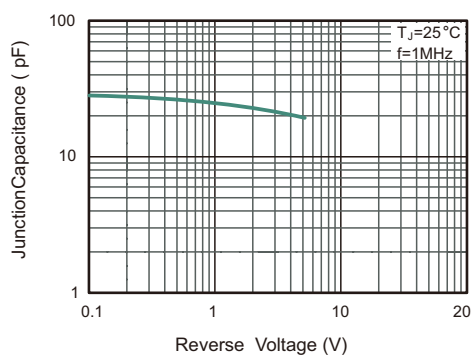


Fig.5 Typical Junction Capacitance

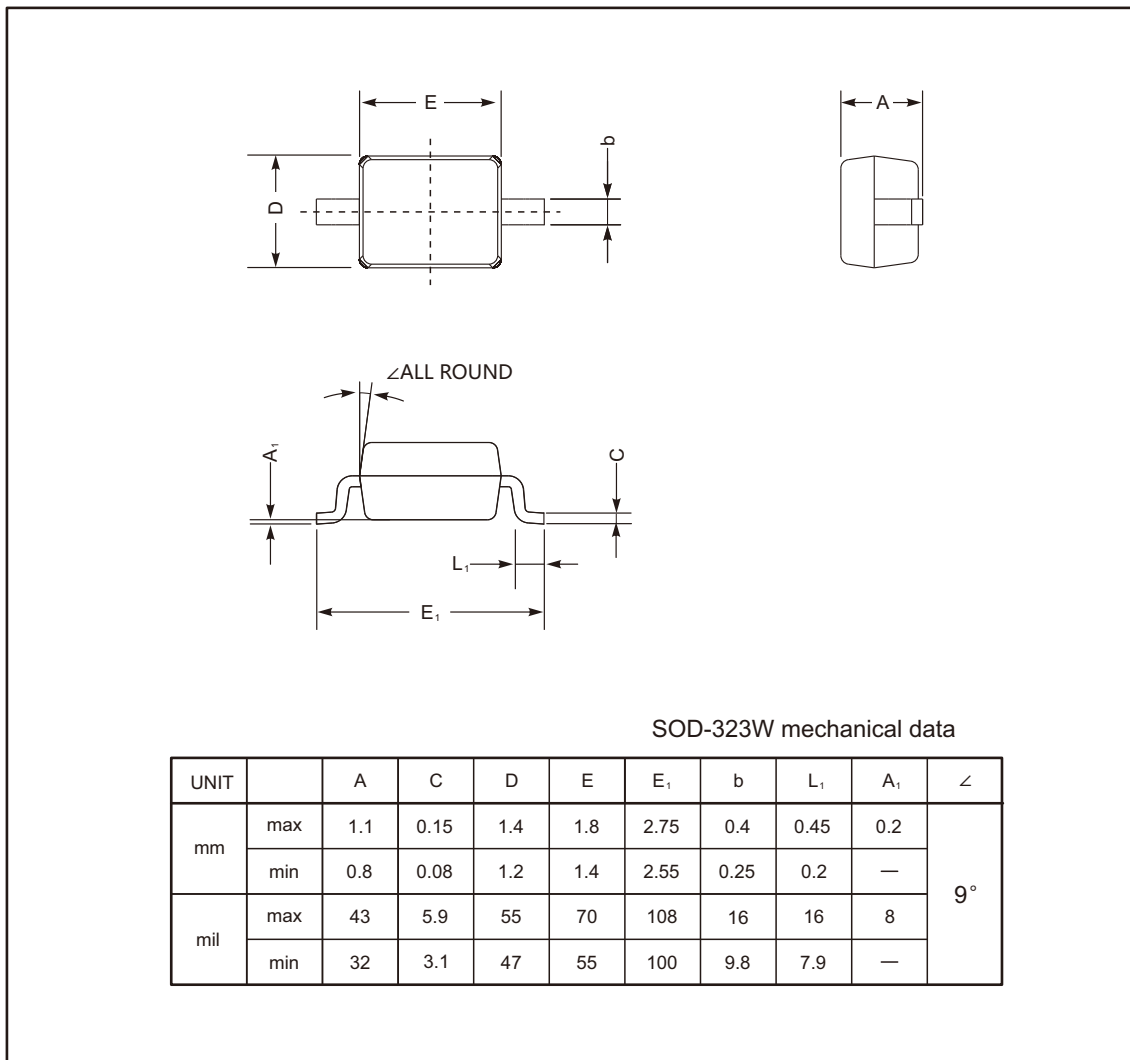




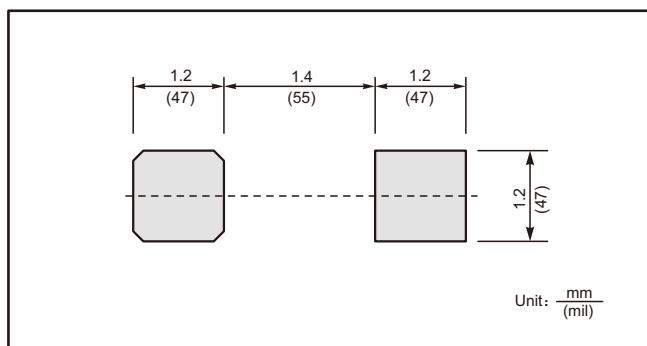
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323W



The recommended mounting pad size



Marking

Type number	Marking code
SD103AWS	S4
SD103BWS	S5
SD103CWS	S6



Important Notice and Disclaimer

Jingdao Microelectronics reserves the right to make changes to this document and its products and specifications at any time without notice.

Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.

Jingdao Microelectronics makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, not does Jingdao Microelectronics assume any liability for application assistance or customer product design.

Jingdao Microelectronics does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.

No license is granted by implication or otherwise under any intellectual property rights of Jingdao Microelectronics.

Jingdao Microelectronics products are not authorized for use as critical components in life support devices or systems without express written approval of Jingdao Microelectronics.