



Schottky Barrier Diode

FEATURES

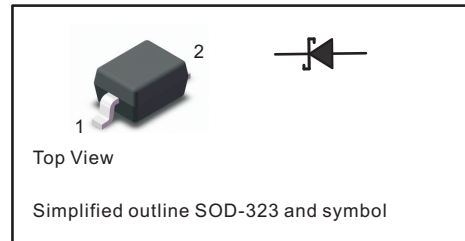
- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Negligible Reverse Recovery Time
- Low Capacitance

MECHANICAL DATA

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

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



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}	13			A
Maximum Instantaneous Forward Voltage	V_F	$I_F=20mA$			0.37
		$I_F=200mA$			0.60
Power Dissipation	P_D	200			mW
Reverse current	I_R	SD103AWS, $V_R=30V$	5	–	uA
		SD103BWS, $V_R=20V$	–	5	
		SD103CWS, $V_R=10V$	–	–	
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	300			°C/W
Reverse voltage	$V_{(BR)R}$	SD103AW	40		V
		SD103BW	30		
		SD103CW	20		
Reverse recovery time	t_{rr}	$I_F=I_R=200mA, I_{rr}=0.1 \times I_R, R_L=100\Omega$			ns
Forward Continuons Current	I_{FM}	350			mA
Total capacitance	C_{tot}	$V_R=0V, f=1MHz$			pF
Junction temperature	T_j	125			°C
Storage temperature	T_{stg}	-55 ~ +150			°C



Fig.1 Power Derating Curve

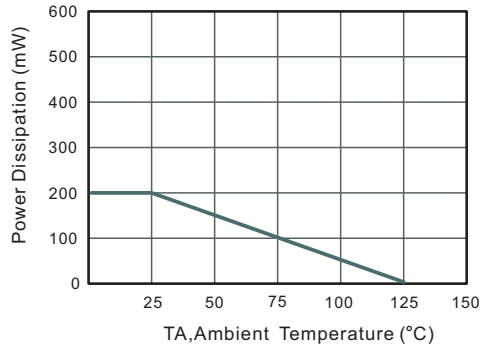


Fig.2 Typical Reverse Characteristics

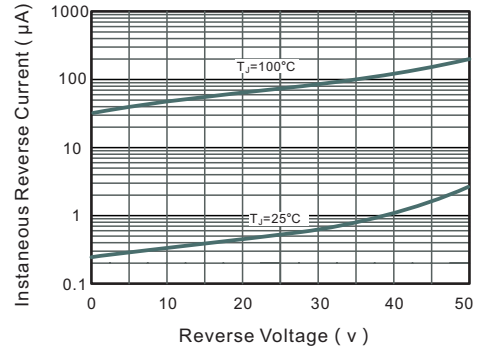


Fig.3 Forward Characteristics

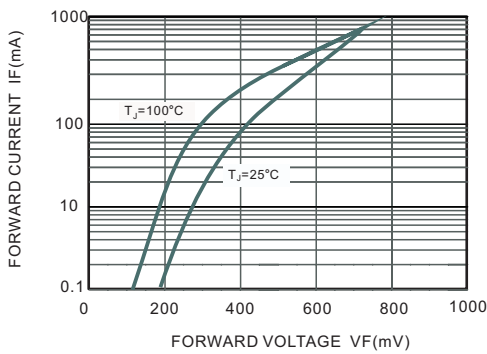


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current

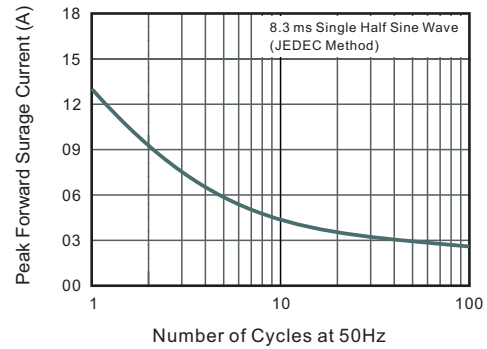


Fig.5 Typical Junction Capacitance

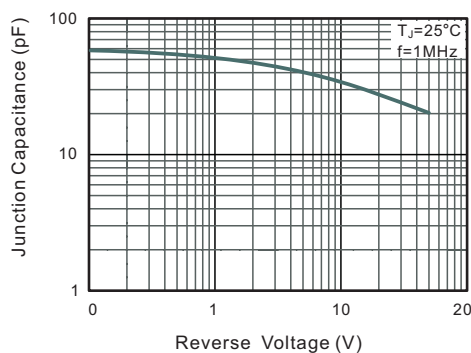
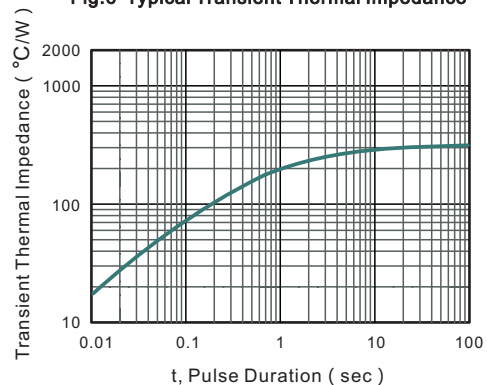


Fig.6 Typical Transient Thermal Impedance

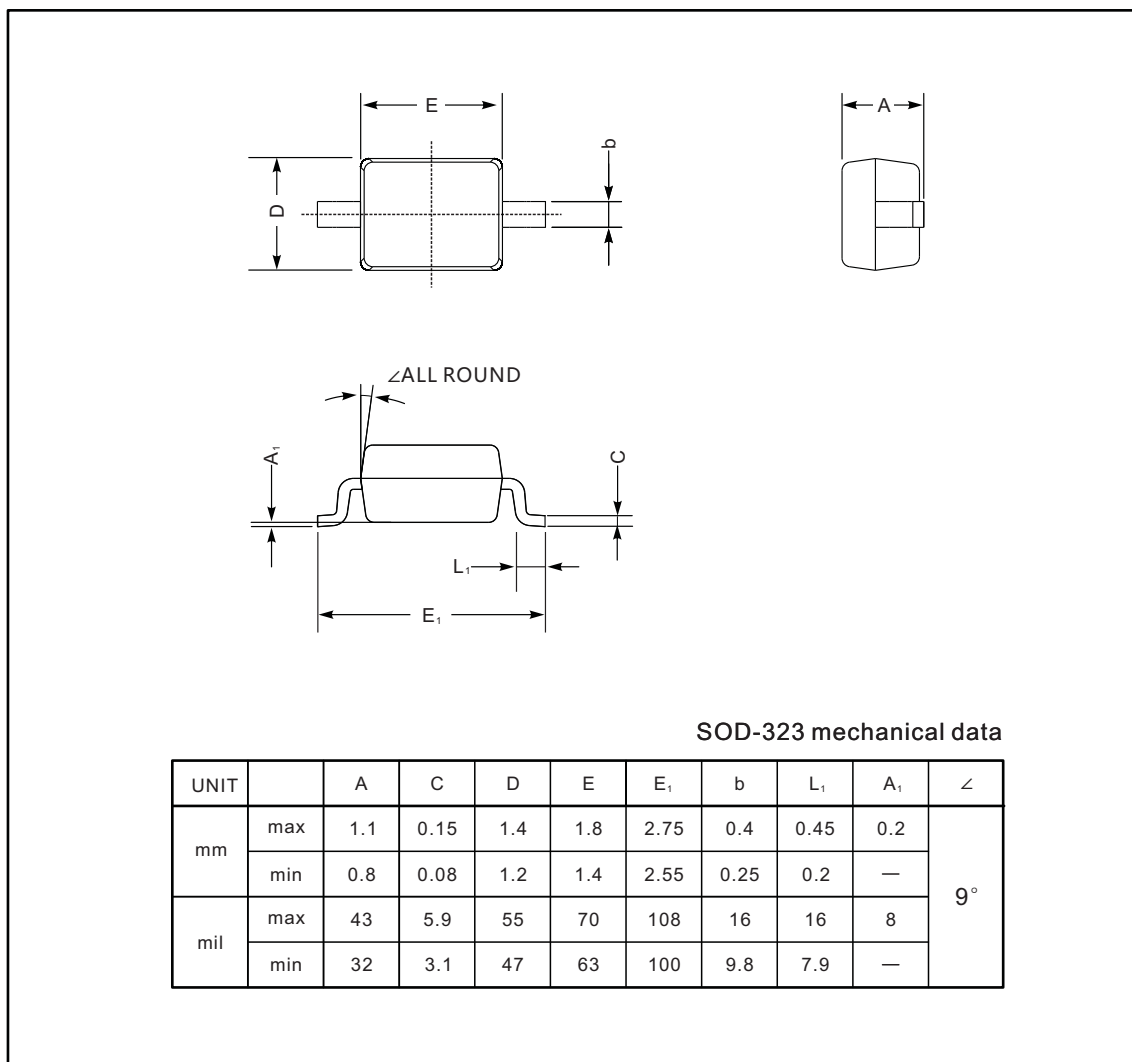




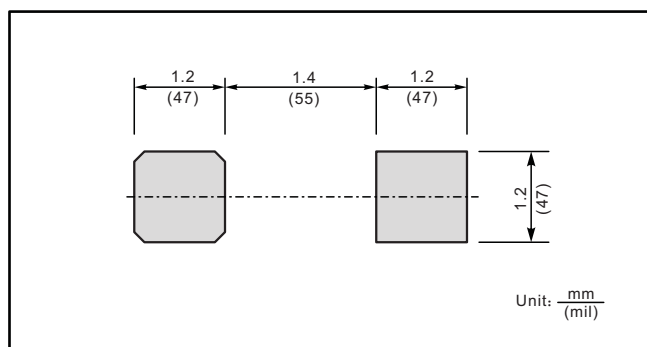
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



The recommended mounting pad size



Marking

Type number	Marking code
SD103AWS	S4
SD103BWS	S5
SD103CWS	S6