

SD103AWSAT THRU SD103CWSAT

Schottky Barrier Diode

Reverse Voltage - 20 to 40V

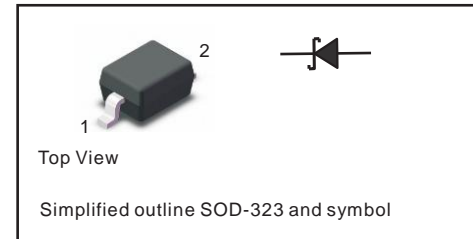
Forward Current - 13.0A

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-323
- ◆ 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	SD103AWSAT	SD103BWSAT	SD103CWSAT	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 $I_F=20mA$ $I_F=200mA$	V_F	0.37			V
		0.60			
Power Dissipation	P_D	200			mW
Reverse current SD103AWSAT, $V_R=30V$ SD103BWSAT, $V_R=20V$ SD103CWSAT, $V_R=10V$	I_R	5	–	–	uA
		–	5	–	
		–	–	5	
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	300			°C/W
Reverse voltage $I_R=100uA$	$V_{(BR)R}$	SD103AWAT	40		V
		SD103BWAT	30		
		SD103CWAT	20		
Reverse recovery time $I_F=I_R=200mA, I_{rr}=0.1 \times I_R, R_L=100\Omega$	t_{rr}	10			ns
Forward Continuous Current	I_{FM}	350			mA
Total capacitance $V_R=0V, f=1MHz$	C_{tot}	50			pF
Junction temperature	T_j	125			°C
Storage temperature	T_{stg}	-55 ~ +150			°C

Dated:06/2018

Rev: 1.0

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Typical Characteristics Curves

Fig.1 Power Derating Curve

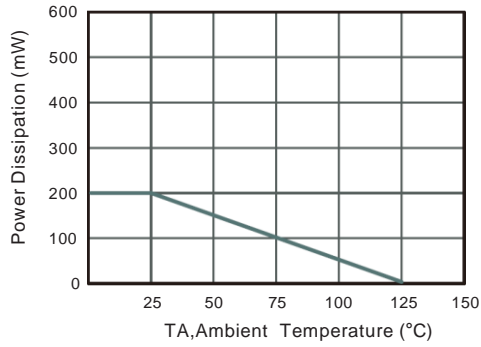


Fig.2 Typical Reverse Characteristics

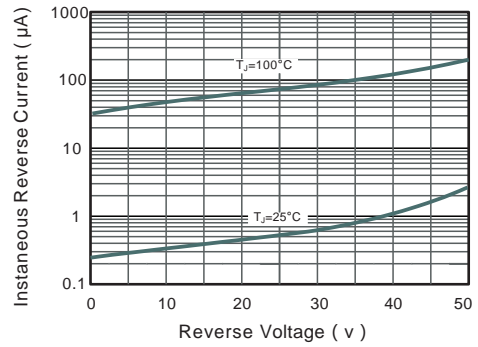


Fig.3 Forward Characteristics

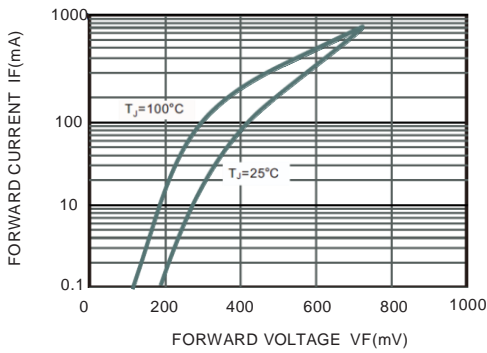


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current

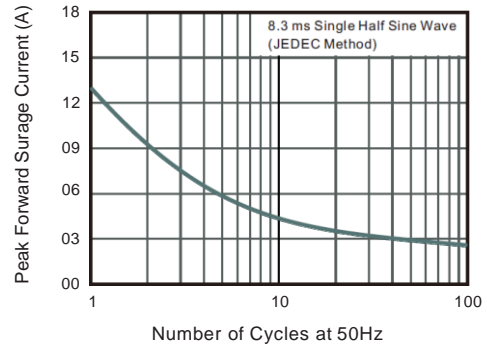


Fig.5 Typical Junction Capacitance

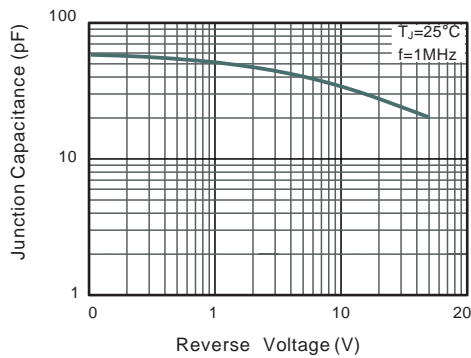
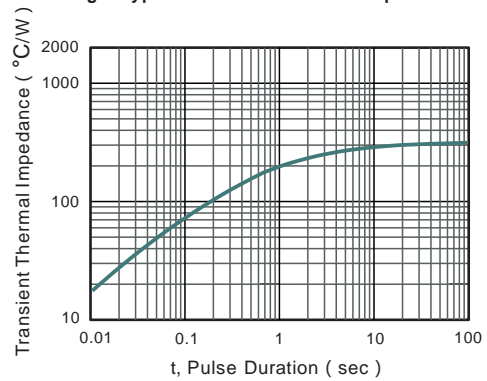


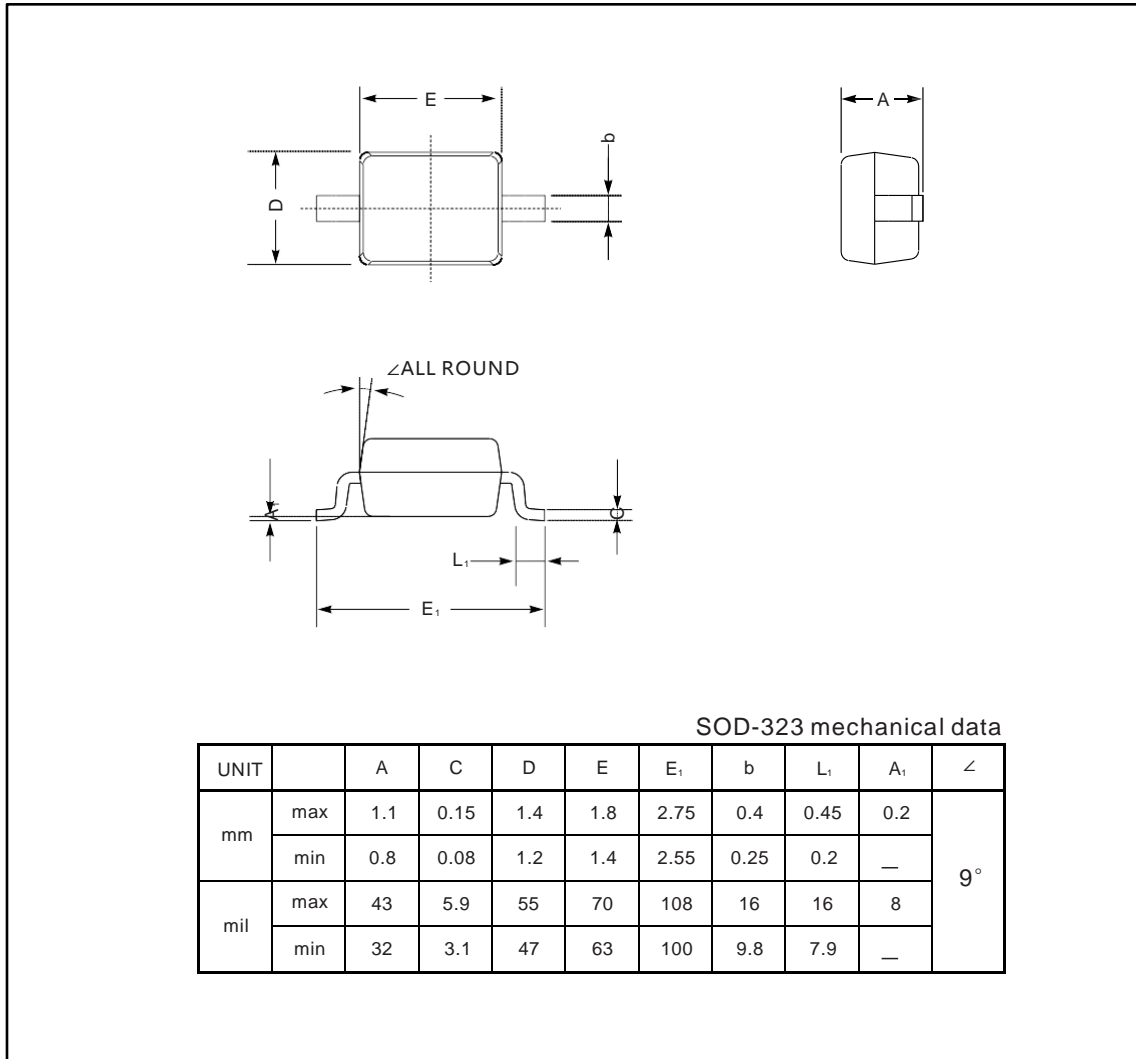
Fig.6 Typical Transient Thermal Impedance



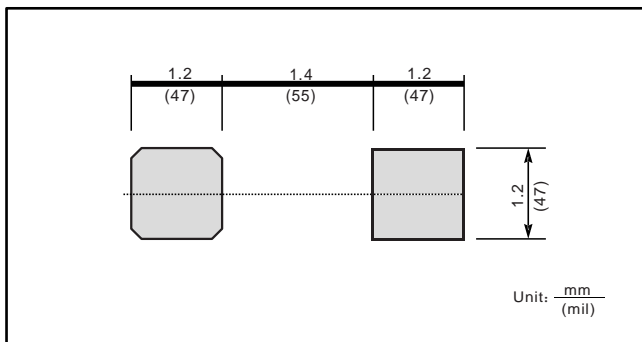
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Package Outline

SOD-323



The recommended mounting pad size



Marking

Type number	Marking code
SD103AWSAT	S4
SD103BWSAT	S5
SD103CWSAT	S6