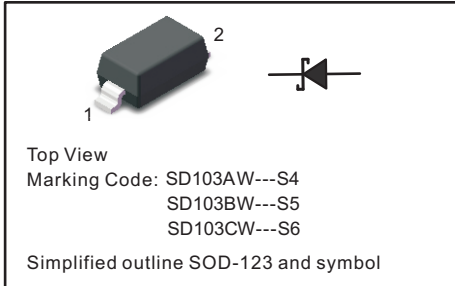


## Schottky Barrier Diode

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



### FEATURES

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

### MECHANICAL DATA

- ◆ Case: SOD-123
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026
- ◆ Approx. Weight: 16mg/0.00056oz

### Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	SD103AW	SD103BW	SD103CW	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 0.60			V
Power Dissipation	$P_D$	400			mW
Reverse current $V_R=30V$ $V_R=20V$ $V_R=10V$	$I_R$	5 – –	– 5 –	– – 5	uA
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	300			°C/W
Reverse voltage $I_R=100\mu A$	$V_{(BR)}$	SD103AW SD103BW SD103CW	40 30 20		V
Reverse recovery time $I_F=I_R=200mA, I_{rr}=0.1 \times I_R, R_L=100\Omega$	$t_{rr}$	10			ns
Forward Continuons Current	$I_{FM}$	350			mA
Total capacitance $V_R=0V, f=1MHz$	$C_{tot}$	28			pF
Junction temperature	$T_j$	125			°C
Storage temperature	$T_{stg}$	-55 ~ +150			°C

Fig.1 Power Derating Curve

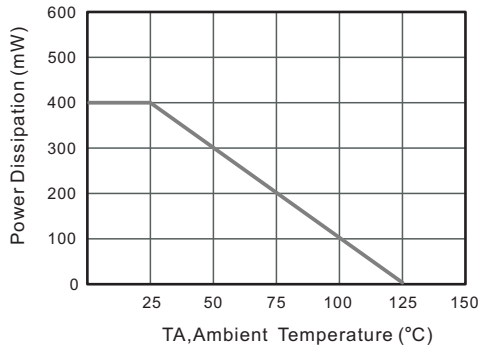


Fig.2 Typical Reverse Characteristics

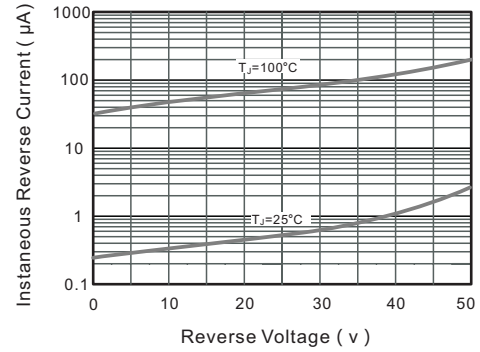


Fig.3 Forward Characteristics

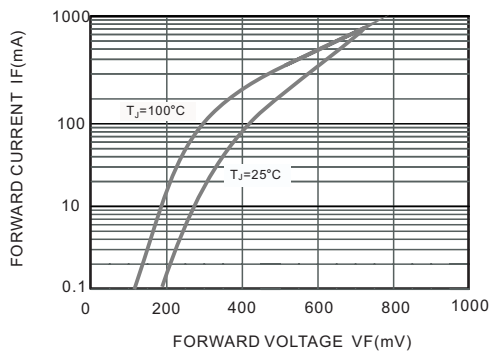


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current

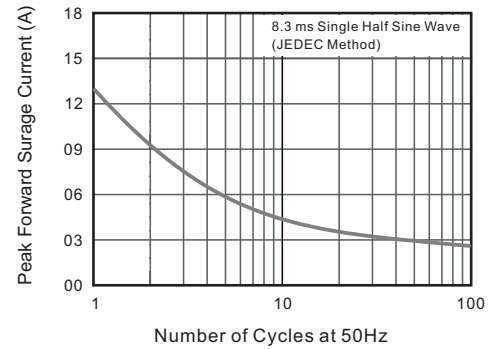


Fig.5 Typical Junction Capacitance

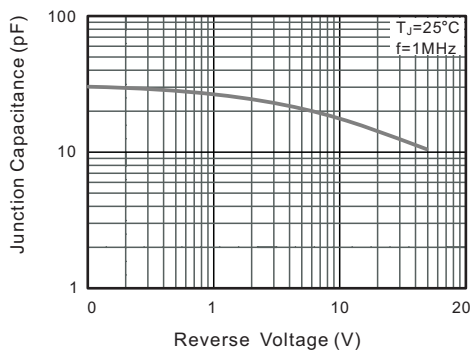
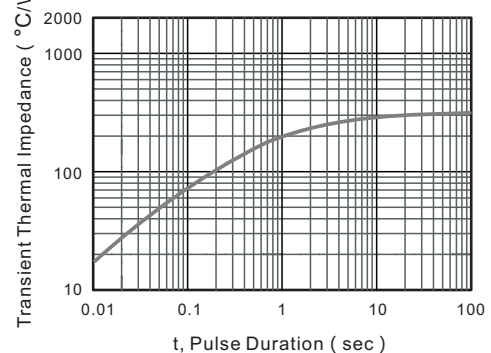


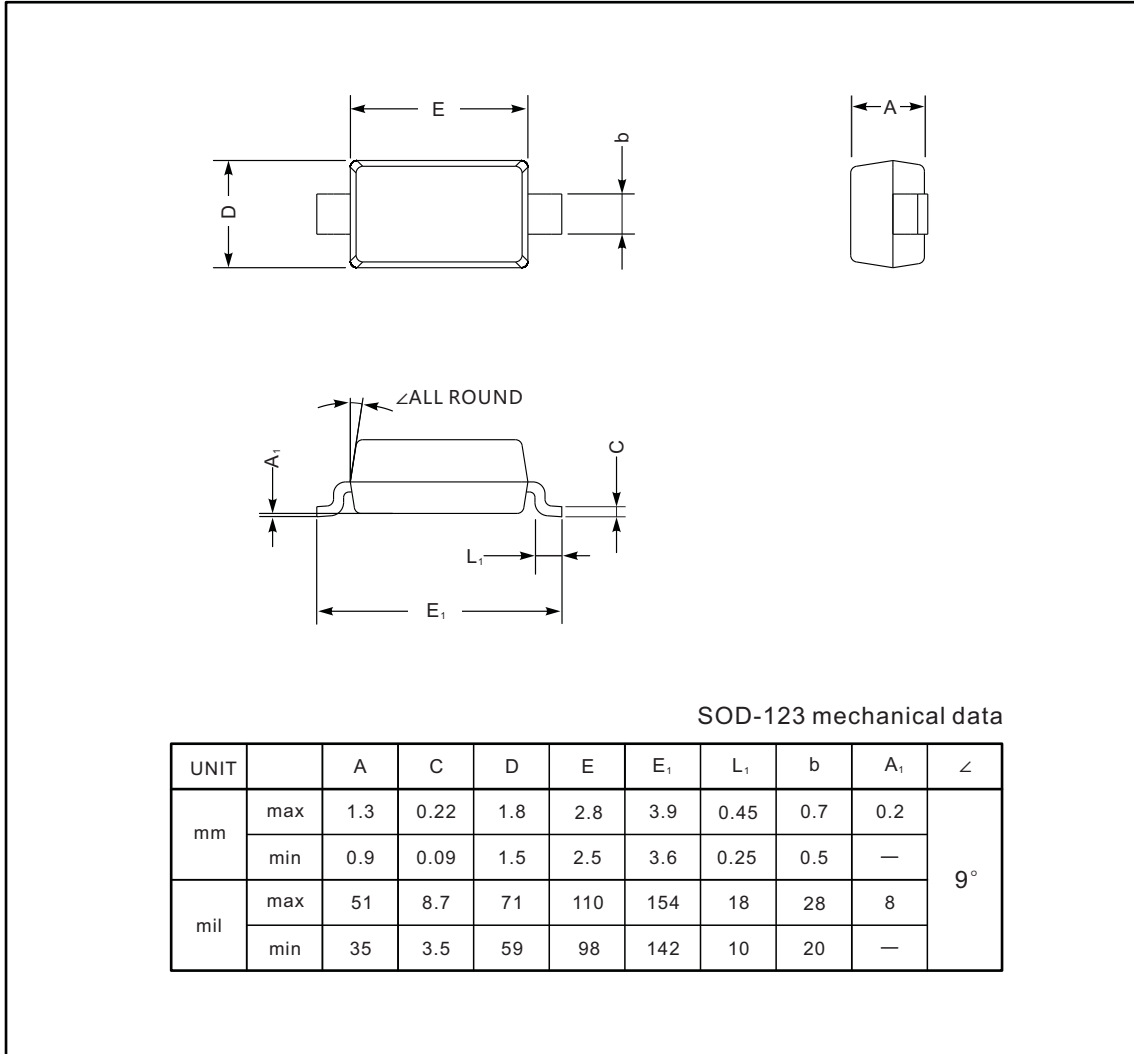
Fig.6 Typical Transient Thermal Impedance



**PACKAGE OUTLINE**

Plastic surface mounted package; 2 leads

SOD-123



**The recommended mounting pad size**

