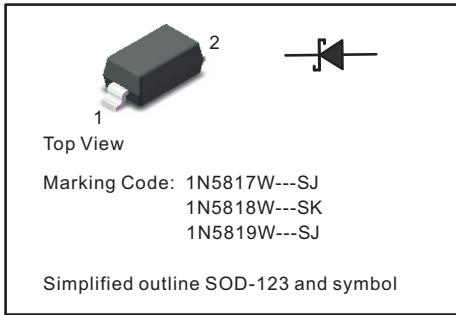


## SCHOTTKY BARRIER RECTIFIERS

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



### FEATURES

- ◆ Metal silicon junction, majority carrier conduction
- ◆ Guarding for overvoltage protection
- ◆ Low power loss, high efficiency
- ◆ High current capability
- ◆ low forward voltage drop
- ◆ High surge capability
- ◆ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

### MECHANICAL DATA

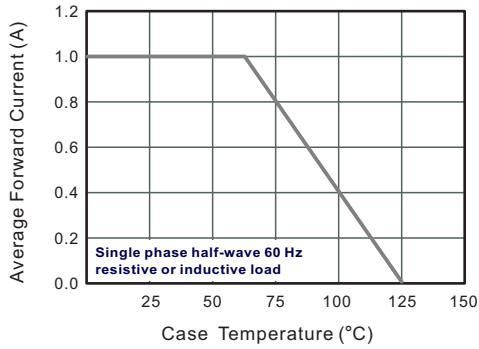
- ◆ Case: SOD-123
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026
- ◆ Approx. Weight: 16mg/0.00056oz

### Maximum Ratings and Electrical characteristics

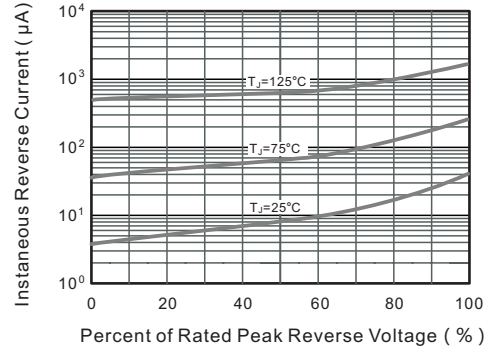
Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	1N5817W	1N5818W	1N5819W	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	30	40	V
Maximum RMS voltage	$V_{RMS}$	14	21	28	V
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1			A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load (JEDEC method)	$I_{FSM}$	25			A
Maximum Instantaneous Forward Voltage at 1 A at 3 A	$V_F$	0.45 0.75	0.55 0.875	0.6 0.9	V
Maximum Instantaneous Reverse Current at $T_A = 25^{\circ}C$ Rated DC Reverse Voltage $T_A = 100^{\circ}C$	$I_R$	1 10			mA
Typical Junction Capacitance	$C_j$	110			pF
Storage and Operating Junction Temperature Range	$T_j, T_{stg}$	-55 ~ +150			$^{\circ}C$

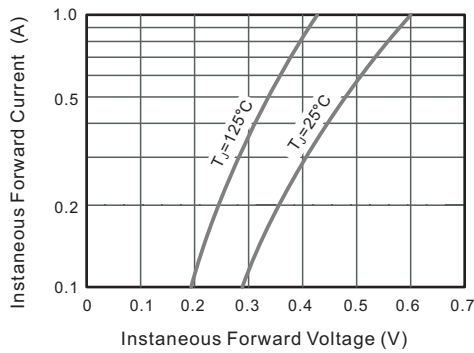
**Fig.1 Forward Current Derating Curve**



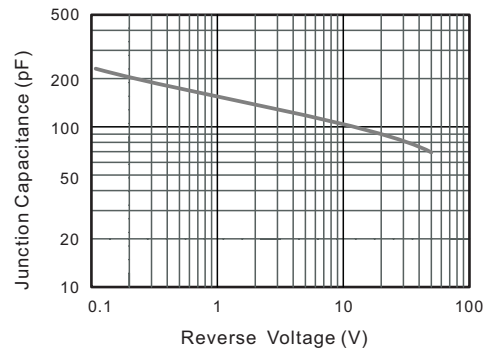
**Fig.2 Typical Reverse Characteristics**



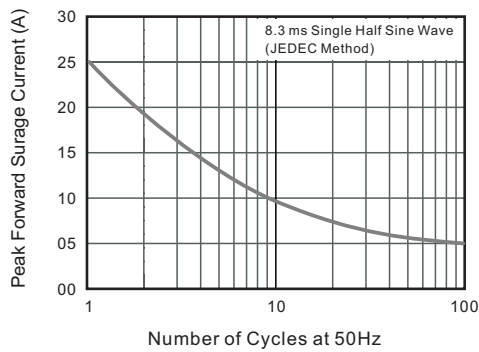
**Fig.3 Typical Forward Characteristic**



**Fig.4 Typical Junction Capacitance**



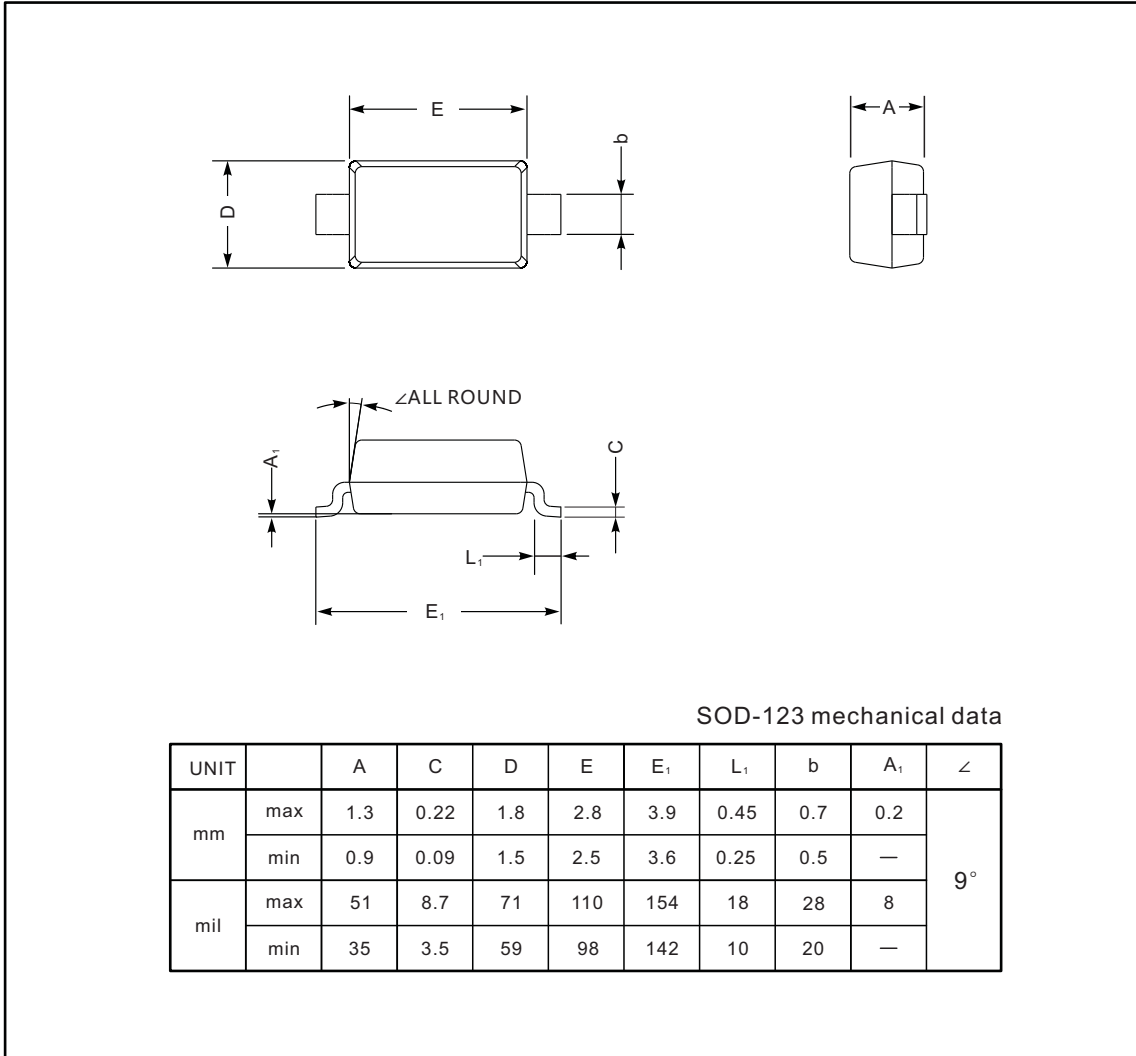
**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



**PACKAGE OUTLINE**

Plastic surface mounted package; 2 leads

SOD-123



**The recommended mounting pad size**

