

1N5817WS THRU 1N5819WS

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

Forward Current-1.0A

Reverse Voltage-20V to 40V

FEATURES

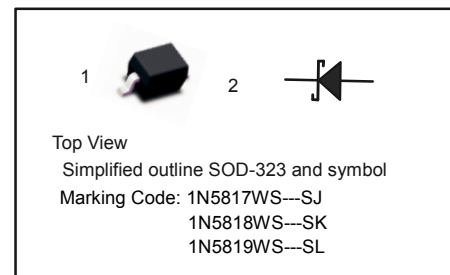
- ◆ Metal silicon junction, majority carrier conduction
- ◆ High current capability
- ◆ Low power loss,high efficiency
- ◆ Guarding for overvoltage protection
- ◆ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- ◆ Low forward voltage drop
- ◆ High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

MECHANICAL DATA

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

PINING

PIN	DESCRIPTION
1	Cathode
2	Anode



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derating by 20 %.

PARAMETER	SYMBOL	1N5817WS	1N5818WS	1N5819WS	UNIT
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 at $T_C=75^\circ\text{C}$	$I_{F(AV)}$	1.0			A
Peak Forward Surge Current (Note1)	I_{FSM}	25			A
Maximum Forward Voltage at 1.0 A 3.0 A	V_F	0.45 0.75	0.55 0.875	0.6 0.9	V
Maximum DC Reverse Current at Rated DC Blocking Voltage at $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	I_R	1 10			mA
Typical Junction Capacitance (Note2)	C_J	110			pF
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150			°C

Notes: 1. Measured at 8.3 ms single half sine wave superimposed on rated load (JEDEC Method).

2. Measured at 1MHz and applied reverse voltage of 4 V D.C.

Dated: 04/2016

Rev:1.0

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RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

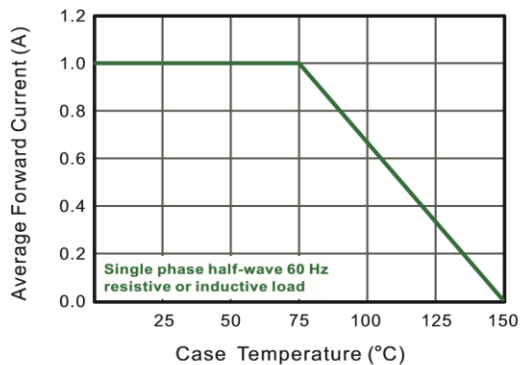


Fig.2 Typical Reverse Characteristics

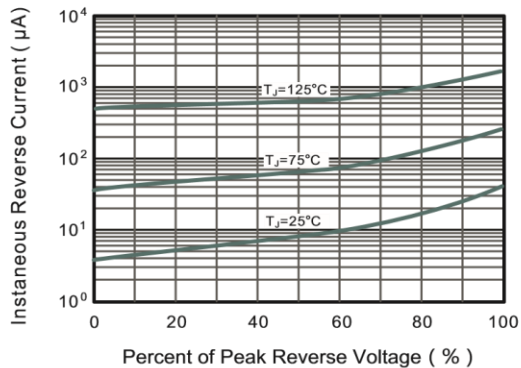


Fig.3 Typical Forward Characteristic

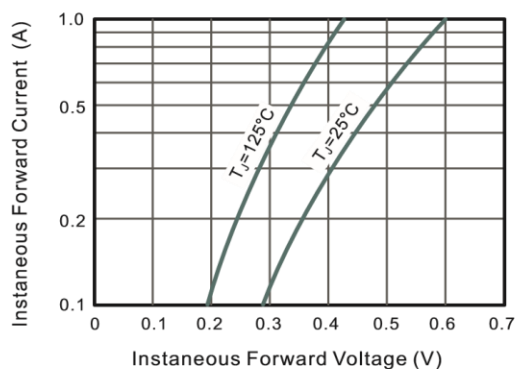


Fig.4 Typical Junction Capacitance

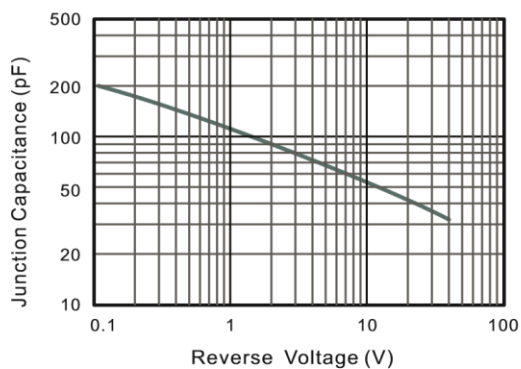
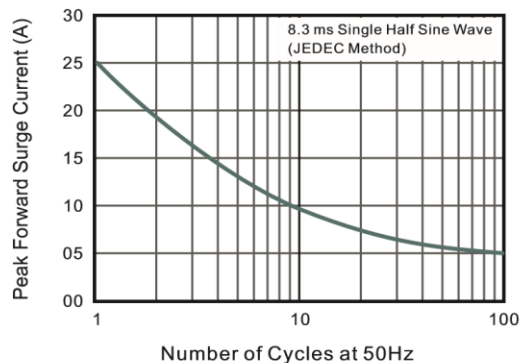


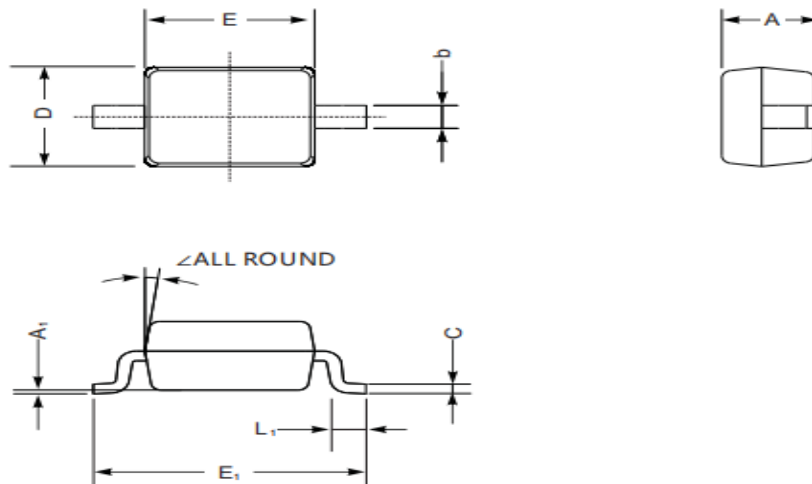
Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



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PACKAGE OUTLINE

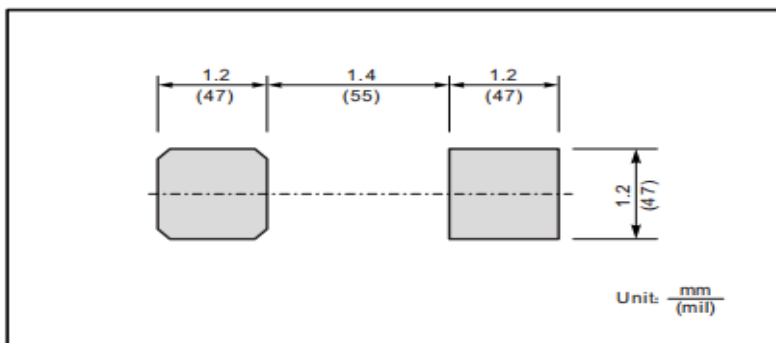
SOD-323



SOD-323 mechanical data

UNIT		A	C	D	E	E ₁	b	L ₁	A ₁	∠
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2	9°
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	—	
mil	max	43	5.9	55	70	108	16	16	8	
	min	32	3.1	47	63	100	9.8	7.9	—	

The recommended mounting pad size



ORDERING INFORMATION

Device	Package	Shipping
1N5817WS 1N5818WS 1N5819WS	SOD-323	3,000/Tape & Reel (7 inches)