















**ESD** 

TVS

MOS

LDO

Diode

Sensor

DC-DC

# **Product Specification**

Domestic Part Number	B5817WS THRU B5819WS
<ul><li>Overseas Part Number</li></ul>	B5817WS THRU B5819WS
▶ Equivalent Part Number	B5817WS THRU B5819WS





## SCHOTTKY BARRIER RECTIFIERS 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-323

Terminals: Solderable per MIL-STD-750, Method 2026

Approx. Weight: 5.48mg / 0.00019oz

#### **PINNING**

PIN	DESCRIPTION
1	Cathode
2	Anode





Top View

Marking Code: B5817WS---SJ

B5818WS---SK B5819WS---SL

Simplified outline SOD-323 and symbol

#### Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	B5817WS	B5818WS	B5819WS	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	30	40	٧
Maximum RMS voltage	$V_{RMS}$	14	21	28	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	V
Maximum Average Forward Rectified Current	I <sub>F(AV)</sub>	1		А	
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load (JEDEC method)	I <sub>FSM</sub>	9			А
Maximum Instantaneous Forward Voltage at 1 A at 3 A	V <sub>F</sub>	0.45 0.75	0.55 0.875	0.6 0.9	V
Maximum Instantaneous Reverse Current at TA = 25°C Rated DC Reverse Voltage TA = 100°C	I <sub>R</sub>	1 10		mA	
Typical Junction Capacitance	C <sub>j</sub>	110		pF	
Storage and Operating Junction Temperature Range	$T_j$ , $T_{stg}$	-55 ~ +150			°C



Fig.1 Forward Current Derating Curve

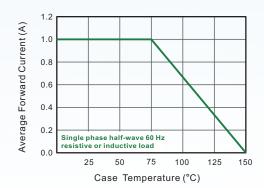


Fig.2 Typical Reverse Characteristics

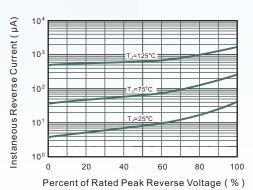


Fig.3 Typical Forward Characteristic

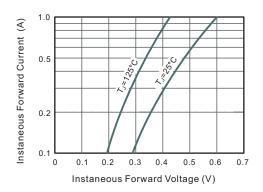


Fig.4 Typical Junction Capacitance

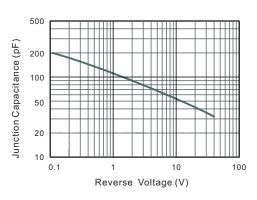
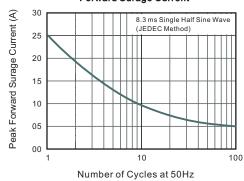


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

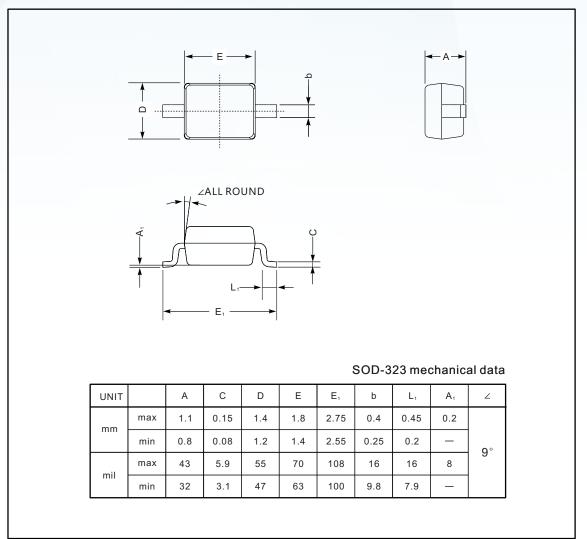




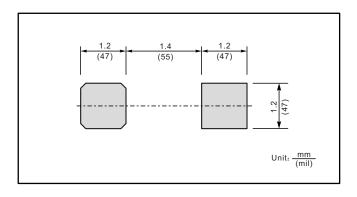
#### PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



#### The recommended mounting pad size



#### Marking

Type number	Marking code		
B5817WS	SJ		
B5818WS	SK		
B5819WS	SL		



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