

**Surface Mount Schottky Rectifier**  
**Reverse Voltage - 40V**  
**Forward Current - 1.0A**

## FEATURES

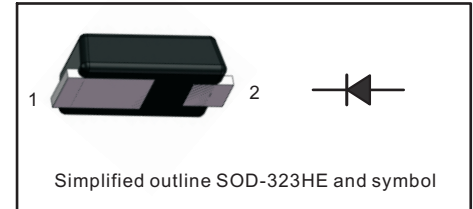
- Heatsink structure
- Metal silicon junction, majority carrier conduction
- Super Low VF Schottky barrier diodes
- For surface mounted applications
- Low power loss, high efficiency
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

## MECHANICAL DATA

- Case: SOD-323HE
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 5.4mg/0.00019oz

## PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



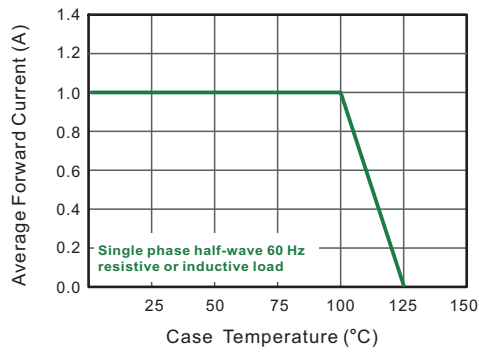
## Maximum Ratings (TA = 25 °C unless otherwise noted)

Parameter	Symbols	B5819WSE	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	40	V
Maximum RMS voltage	$V_{RMS}$	28	V
Maximum DC blocking voltage	$V_{DC}$	40	V
Maximum average forward rectified current	$I_{F(AV)}$	1.0	A
Peak forward surge current 8.3 ms single half sinewave superimposed on rated load	$I_{FSM}$	15	A
Operating junction temperature range	$T_j$	- 55 to + 125	°C
Storage temperature range	$T_{stg}$	- 55 to + 150	°C

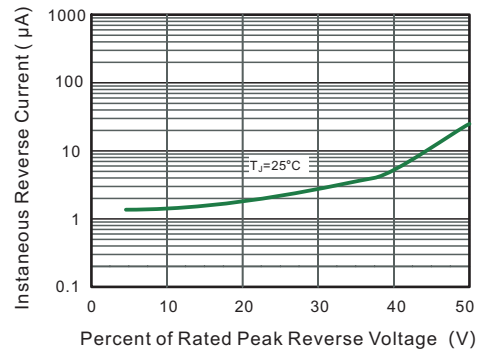
## Electrical Characteristics (TA = 25 °C unless otherwise noted)

Parameter	Test Conditions	Symbols	B5819WSE	Units
Minimum Breakdown voltage	$T_a = 25^{\circ}C, I_R = 1mA$	$V_{BR}$	40	V
Maximum instantaneous forward voltage	$I_F = 1A, T_a = 25^{\circ}C$	$V_F$	0.60	V
Maximum DC reverse current at rated DC blocking voltage	$T_a = 25^{\circ}C$	$I_R$	50	uA
Typical junction capacitance	4.0 V, 1 MHz	$C_J$	60	pF

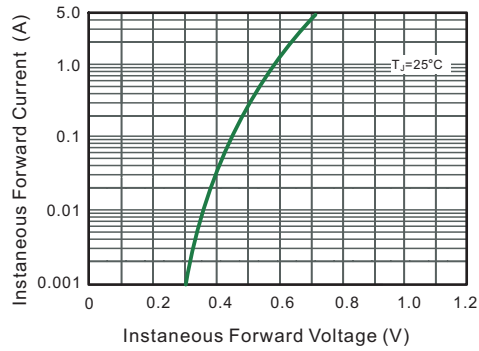
**Fig.1 Forward Current Derating Curve**



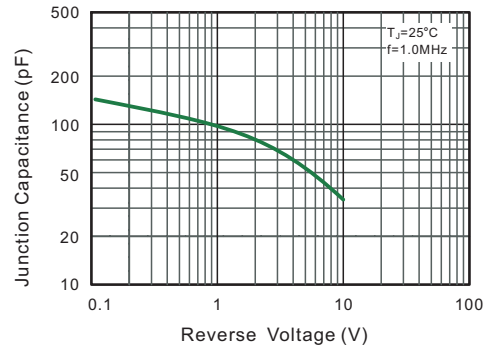
**Fig.2 Typical Reverse Characteristics**



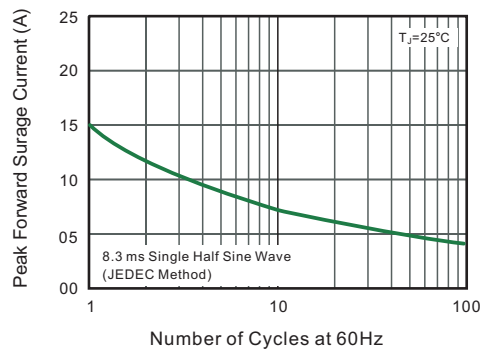
**Fig.3 Typical Forward Characteristic**



**Fig.4 Typical Junction Capacitance**



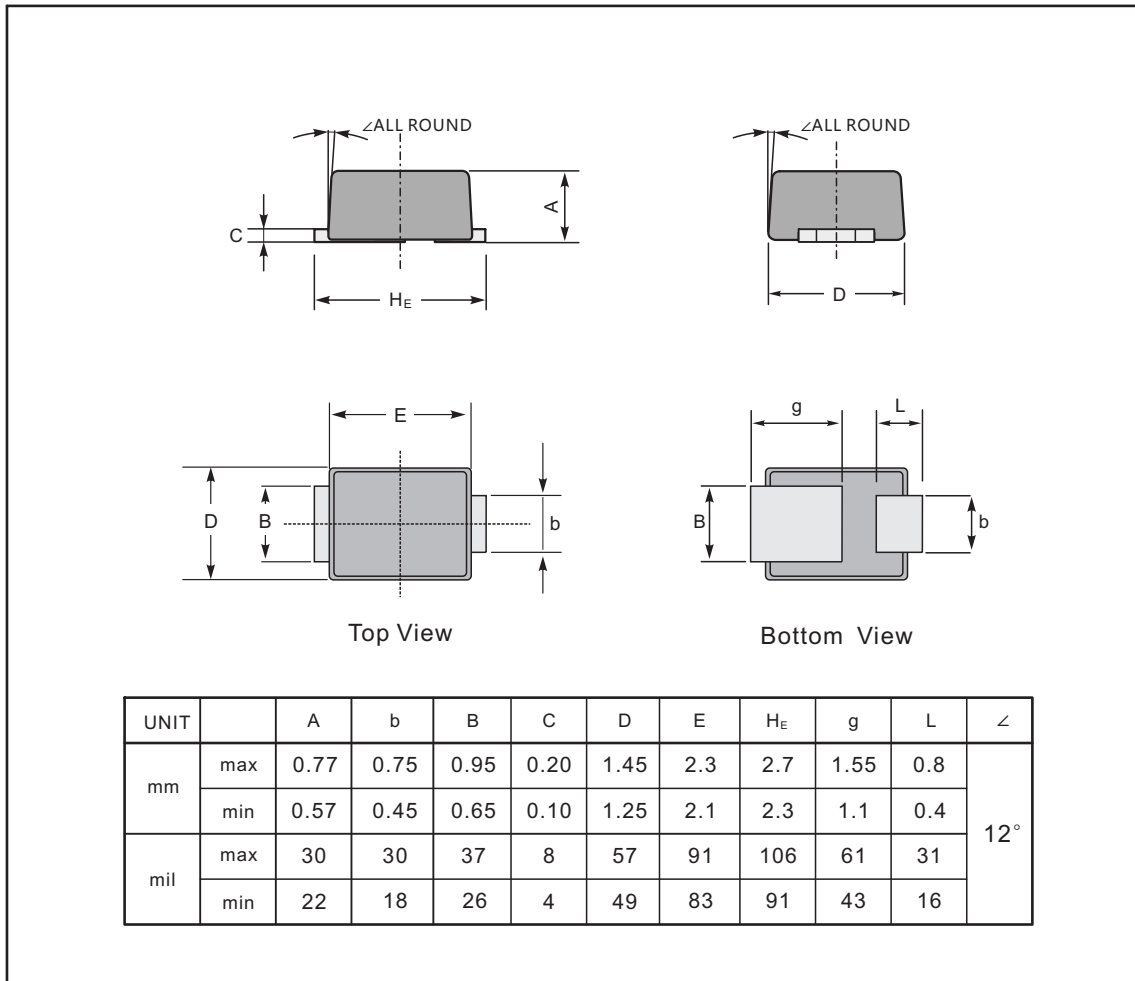
**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



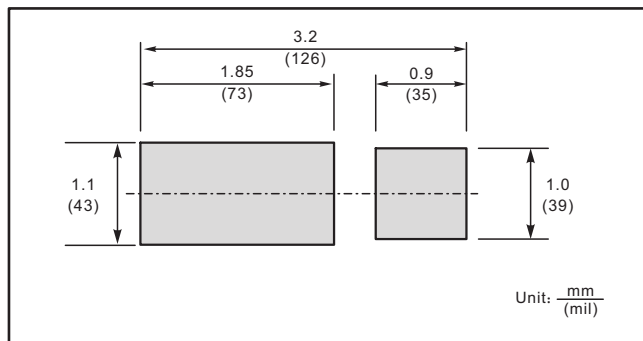
## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323HE



### The recommended mounting pad size



### Marking

Type number	Marking code
B5819WSE	SL