



Surface Mount Schottky Barrier Bridge Rectifiers

Reverse Voltage - 20 to 100 Volts
Forward Current - 0.8 Amperes

Features

- Ideal for automatic placement
- Metal-Semiconductor junction with guarding
- Epitaxial construction
- Very low forward voltage drop
- High surge capacity
- Plastic material has UL flammability classification 94V-0

Mechanical Data

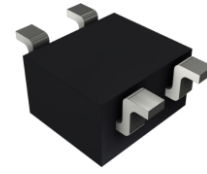
- Polarity: Symbol marked on body
- Mounting position: Any

Note: Products with logo or are made by HY Electronic (Cayman) Limited.

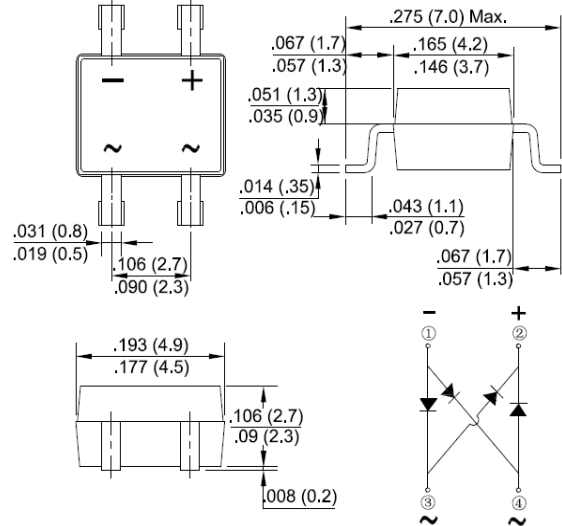
Applications

- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications.

BS



RoHS COMPLIANT



Package Outline Dimensions in Inches (Millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristics	Symbol	SB2S	SB3S	SB4S	SB5S	SB6S	SB8S	SB10S	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current @T _L =100 °C	I(AV)	0.8							A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I _{FSM}	40							A
I ² t Rating for Fusing (t<8.3ms)	I ² t	6.6							A ² s
Peak Forward Voltage per Diode at 0.8A DC	V _F	0.55		0.7		0.85		V	
Maximum DC Reverse Current at Rated @T _J =25°C	I _R	1.0							mA
DC Blocking Voltage per Diode @T _J =100°C		10							
Typical Junction Capacitance (Note1)	C _J	110							pF
Typical Thermal Resistance Junction to Lead	R _{θJL}	20							°C/W
Operating Junction Temperature Range	T _J	-55 to + 150							°C
Storage Temperature Range	T _{STG}	-55 to + 150							°C

Notes: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

2. The typical data above is for reference only



Fig. 1 - Forward Current Derating Curve

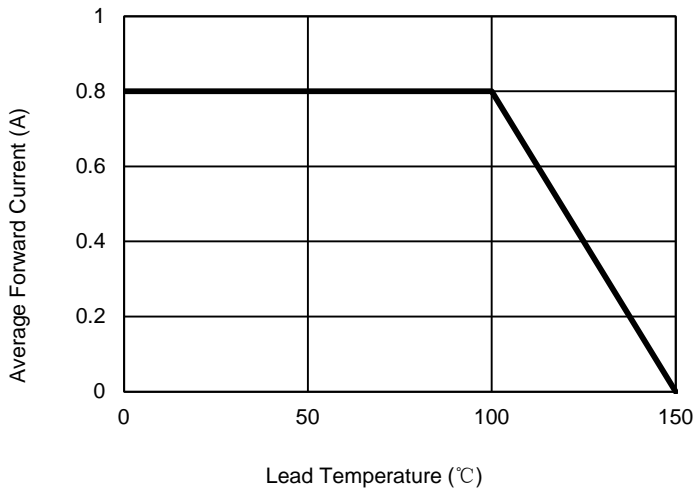


Fig. 2 - Maximum Non-Repetitive Surge Current

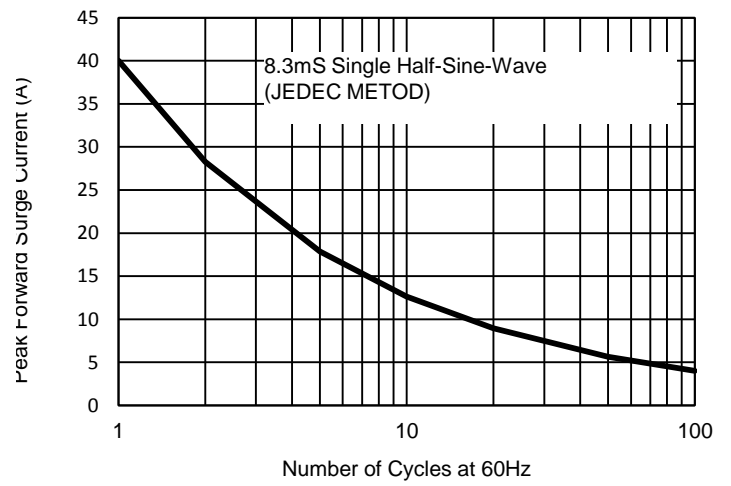


Fig. 3 - Typical Reverse Characteristics

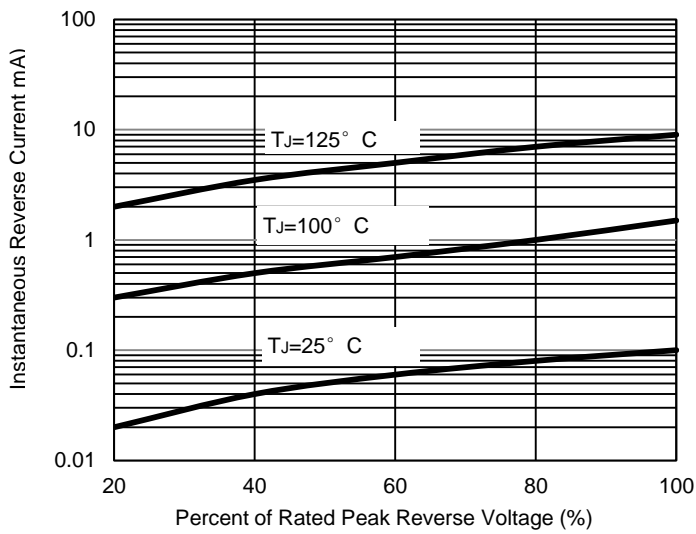


Fig. 4 - Typical Forward Characteristics

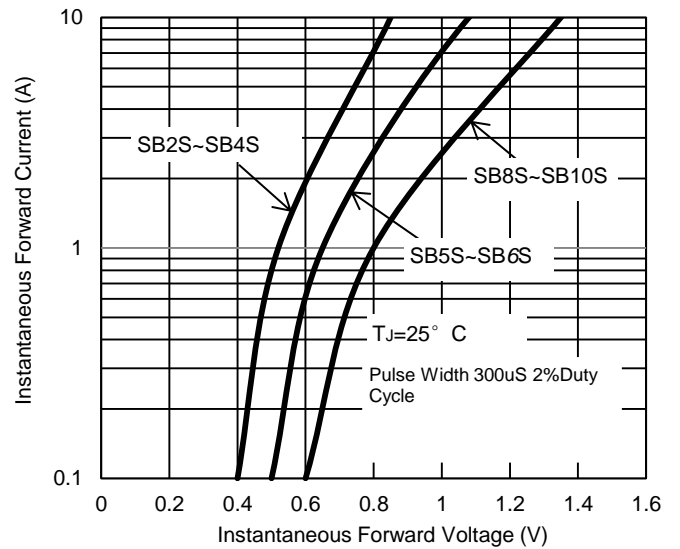
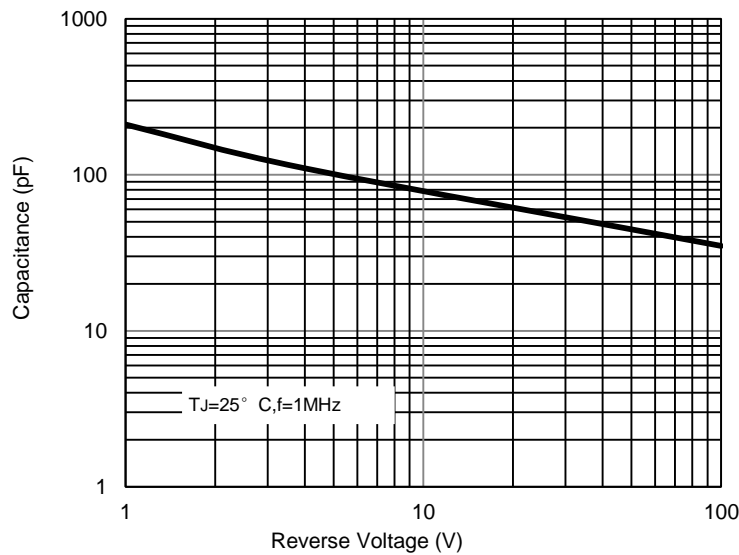


Fig. 5 - Typical Junction Capacitance



The curve above is for reference only.



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