

**Surface Mount Glass Passivated
Bridge Rectifiers****Reverse Voltage - 50 to 1000 Volts****Forward Current - 2.0 Amperes****Features**

- Compact, Thin Profile Package Design
- Ideal for SMT manufacturing
- Reliable robust construction
- Meet UL flammability classification 94V-0

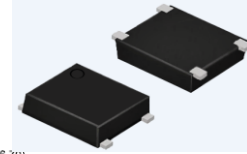
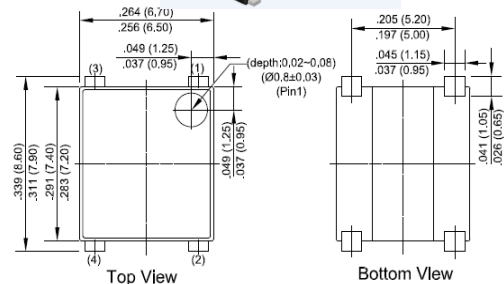
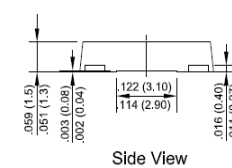
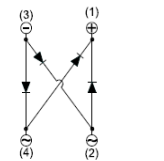
Mechanical Data

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

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

Applications

- General purpose use in AC/DC bridge full wave rectification, for SMPS, lighting ballaster, adapter, etc.

MSBL**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	MSB	MSB	MSB	MSB	MSB	MSB	MSB	Unit
		20A	20B	20D	20G	20J	20K	20M	
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @Tc=110 °C (Note1)	I(AV)	2.0							A
Peak Forward Surge Current @ 8.3ms	I _{FSM}	75							A
Single Half Sine-Wave @ 1.0ms		150							
I ² t Rating for Fusing (1ms < t < 8.3ms)	I ² t	23.3							A ² s
Peak Forward Voltage Per Diode at 1A DC	V _F	0.98							V
Peak Forward Voltage Per Diode at 2A DC	V _F	1							V
Maximum DC Reverse Current at Rated @T _J =25°C	I _R	5							μA
DC Blocking Voltage per Diode @T _J =125°C		500							
Typical junction Capacitance per element (Note 1)	C _J	30							pF
Typical Thermal Resistance to Ambient (Note2)	R _{θJA}	55							°C/W
Typical Thermal Resistance to case (Note2)	R _{θJC}	10							
Typical Thermal Resistance to lead (Note2)	R _{θJL}	15							
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. Thermal Resistance test performed in accordance with JESD-51. Unit mounted on glass-epoxy substrate with

1oz/ft² 20x20 mm copper pad per pin.

3. The typical data above is for reference only

MSB20*-13-92-00

Rev. 11, 18-May-2020



Fig. 1 - Forward Current Derating Curve

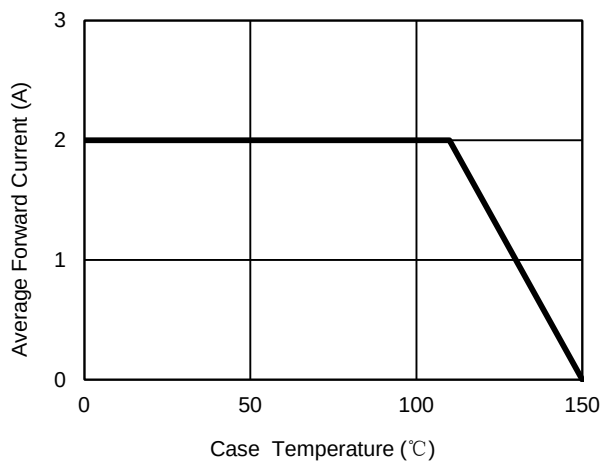


Fig. 2 - Maximum Non-Repetitive Surge Current

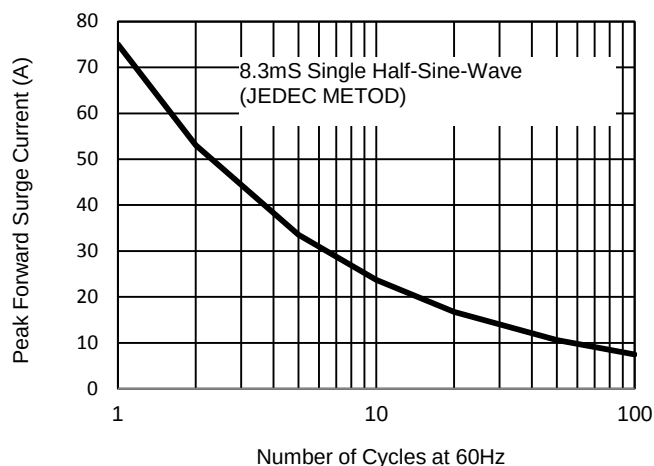


Fig. 3 - Typical Reverse Characteristics

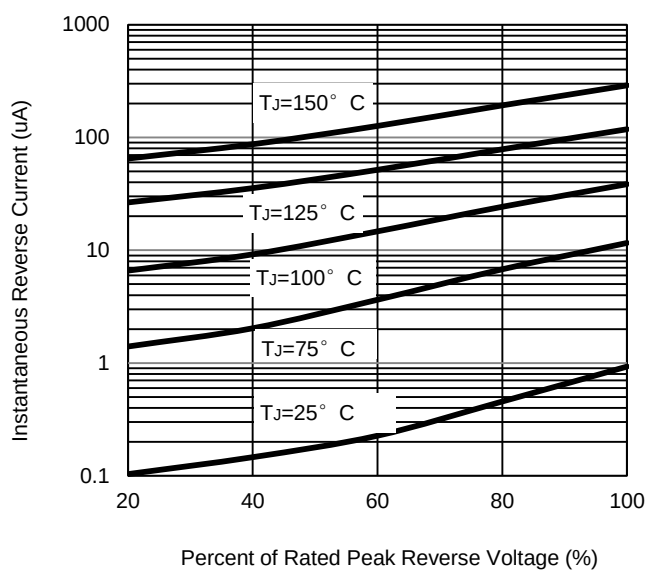


Fig. 4 - Typical Forward Characteristics

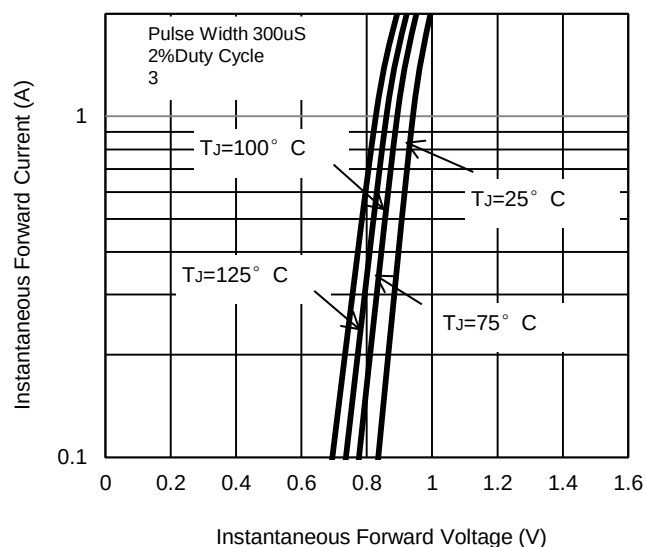
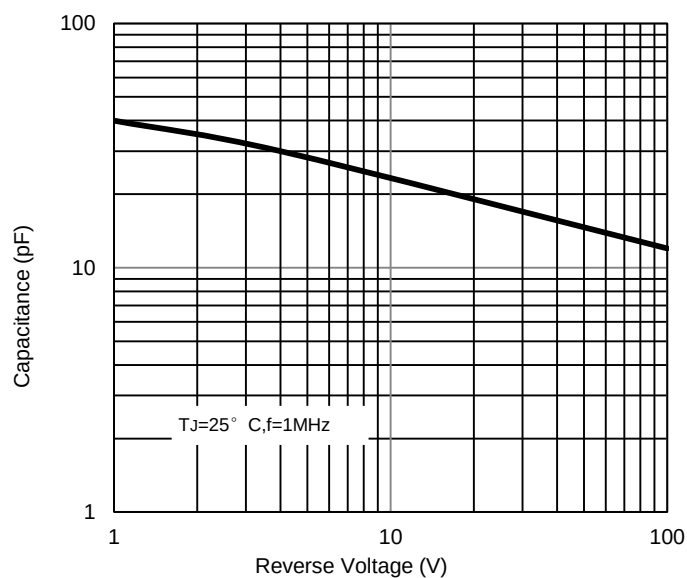


Fig. 5 - Typical Junction Capacitance



The curve above is for reference only.



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