

**Surface Mount Glass Passivated
Bridge Rectifiers****Reverse Voltage - 50 to 1000 Volts****Forward Current - 1.0 Amperes****Features**

- Glass passivated chip
- Ideal for automatic placement
- High surge forward current capability
- Reliable low cost construction utilizing molded plastic technique
- Lead tin plated copper

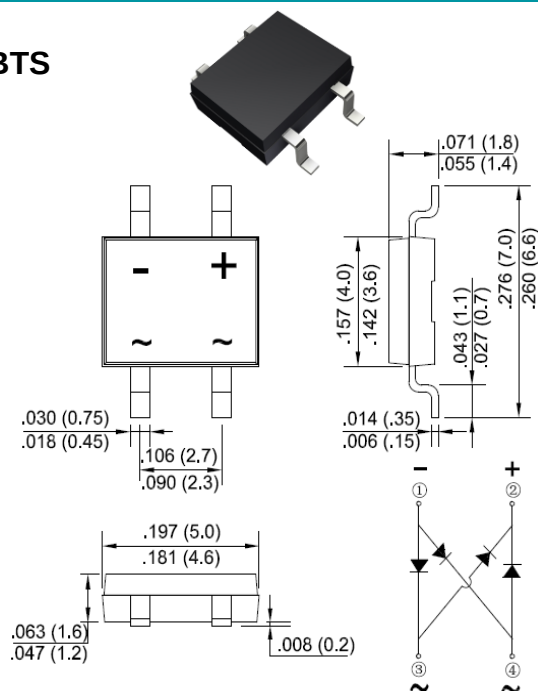
Mechanical Data

- 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.

BTS**RoHS
COMPLIANT****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	BT105S	BT11S	BT12S	BT14S	BT16S	BT18S	BT110S	Unit
Maximum Repetitive Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @TA=40 °C (Note1)	I(AV)	1							A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	IFSM	30							A
I²t Rating for Fusing (t<8.3mS)	I²t	3.7							A²s
Peak Forward Voltage per Diode at 1.0A DC	VF	1.1							V
Maximum DC Reverse Current at Rated @TJ=25°C	IR	5							µA
DC Blocking Voltage per Diode @TJ=125°C		500							
Typical Junction Capacitance (Note2)	CJ	10							pF
Typical Thermal Resistance Junction to Ambient	RθJA	95							°C/W
Operating Junction Temperature Range	TJ	-55 to +150							°C
Storage Temperature Range	TSTG	-55 to +150							°C

Notes:1.Mounted on P.C. board.

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

3.The typical data above is for reference only .



Fig. 1 - Forward Current Derating Curve

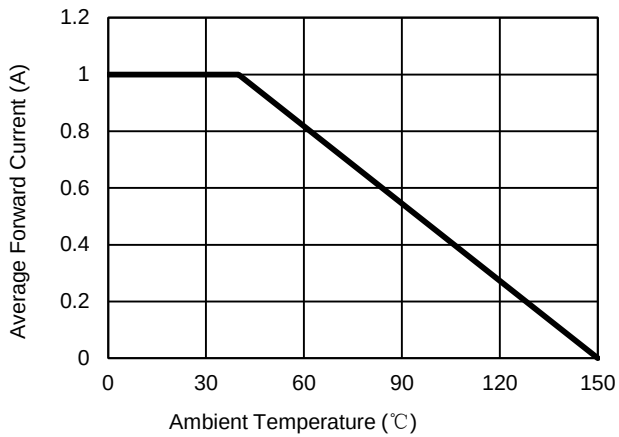


Fig. 2 - Maximum Non-Repetitive Surge Current

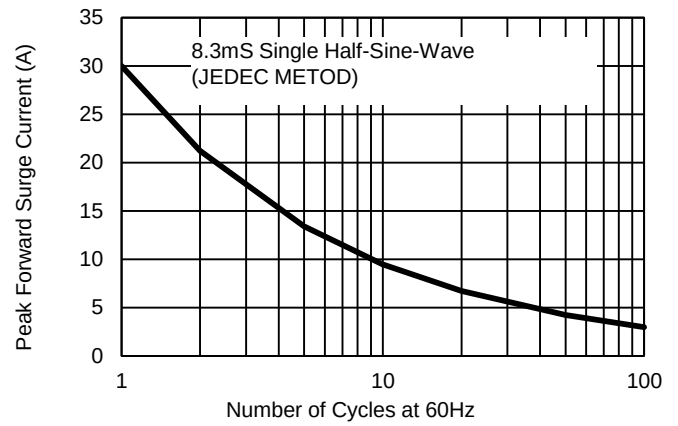


Fig. 3 - Typical Reverse Characteristics

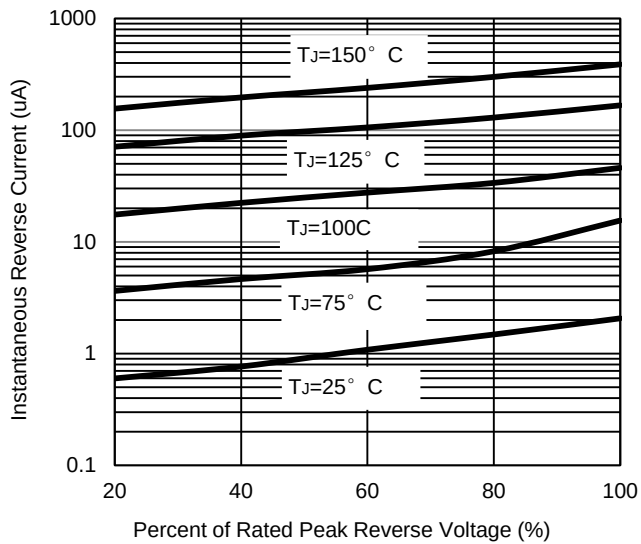


Fig. 4 - Typical Forward Characteristics

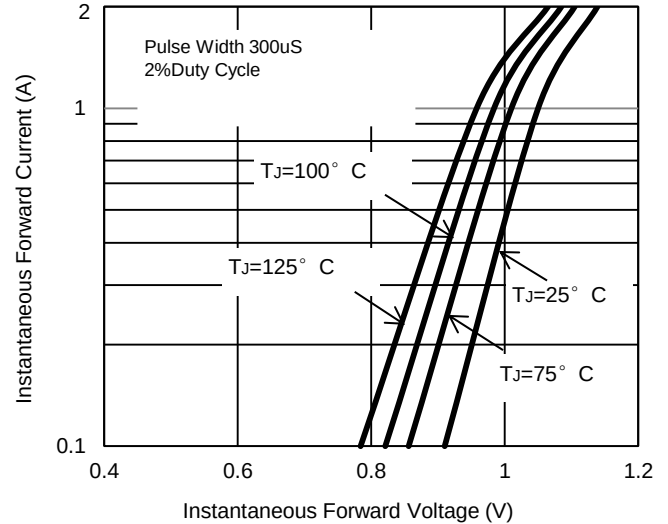
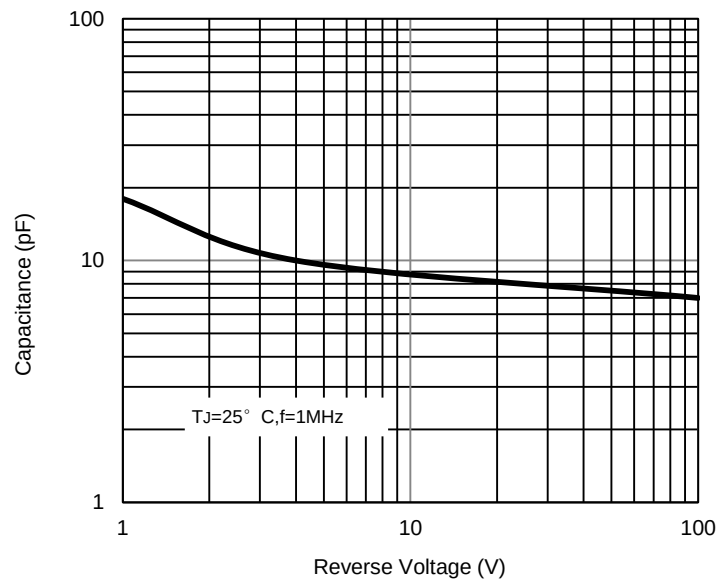


Fig. 5 - Typical Junction Capacitance





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