

T10XB Series (SIP)

10-AMPERE SILICON BRIDGE RECTIFIER

FEATURES

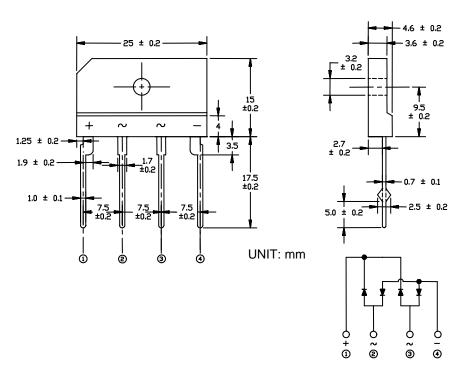
- Low Reverse Leakage Current
- Surge Overload Rating to 120A Peak
- Ideal for Printed Circuit Board Applications
- Epoxy Material UL Recognition Flammability Classification 94V-0

Mechanical Data

Case: Molded Epoxy Resin

Terminals: Plated Leads, Solderable per MIL-STD-202, Method 208

Polarity: Molded on Body



Maximum Ratings & Characteristics

Single Phase, 60 Hz, Resistive or Inductive Load T_a = 25°C Unless Otherwise Specified

CHARACTERISTIC	SYMBOL	T10XB40	T10XB60	T10XB80	UNIT
Peak Repetitive Reverse Voltage	V_{RRM}	400	600	800	V
RMS Reverse Voltage	$V_{R(RMS)}$	280	420	560	V
Average Rectified Output Current @ T _C = 108°C w/ cooling fin	lo	10.0			Α
Average Rectified Output Current @ T _a = 25°C w/o cooling fin	lo	2.7			Α
Non-Repetitive Peak Forward Surge Current 10 mS single half sine-wave superimposed on rated load	I _{FSM}	120			А
Maximum Forward Voltage per Element, I _F = 5.0 A	V _F		V		
Peak Reverse Current per element at $V_R = V_{RRM}$	I _R		μΑ		
Operating and Storage Temperature Range	T _J ,Tstg	(°C		

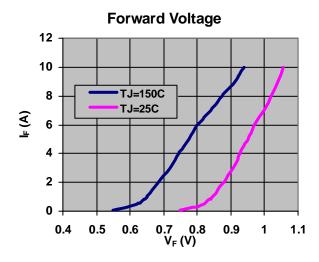
Reference Table for Heat-Sink Size

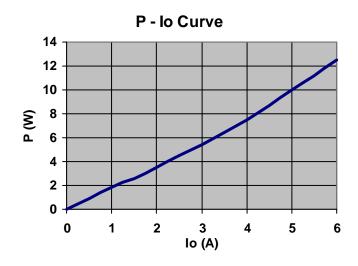
Average Rectified Output Current in Amps	3.0	5.0	7.5	9	11
Cooling Fin Single-face Area S1 (cm ²)	4	75	180	500	900
Cooling Fin Single-face Area S2 (cm ²)	8	65	100	310	490

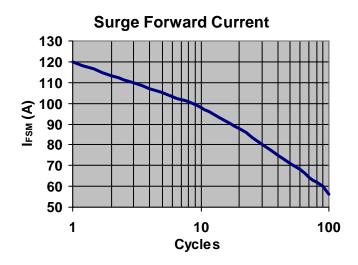
Note: Vertical Mounting at T_a = 40°C. HS Material: S1 = 1.5mm-Thick Aluminum, S2 = 3.0mm-Thick Copper Manufactured by Tianjin Zhong - Huan Semiconductor Co., Ltd.

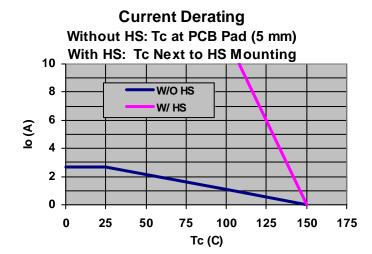
Rev 0, Sep 2002

T10XB Series (SIP)









In order to avoid damaging devices, please observe the following precautions:

- 1. When using automated soldering equipment, use 60/40 (Sn/Pb) solder (melting point of 180° C) with a neutral flux similar to rosin. Preheat time should be limited to 1-2 minutes at 150° C.
- 2. When using a soldering iron, use a tip temperature of less than 300°C (or a soldering iron power of less than 60W). Keep the soldering time below 5 seconds.
- 3. After soldering, remove any flux residue to avoid corrosion.
- 4. Because over-voltage or over-current testing may cause permanent damage to the devices, be sure to check the test equipment for proper voltage, current and ground connection prior to beginning the test.
- 5. If the devices are to be encapsulated, they should be cleaned and dried at $120^{\circ} \pm 5^{\circ}$ C for at least 24 hours prior to encapsulation. Test for compatibility between the device package and the encapsulation material.