## G10XB05H THRU G10XB100H

# SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

Voltage: 50 to 1000V Current: 10.0A



#### **Features**

Glass passivated chip junction

Ideal for printed circuit board

High Ifsm

High surge current capability

High case dielectric strength

This series is UL listed under Recognized Component Index, file

number E330278

#### **Mechanical Data**

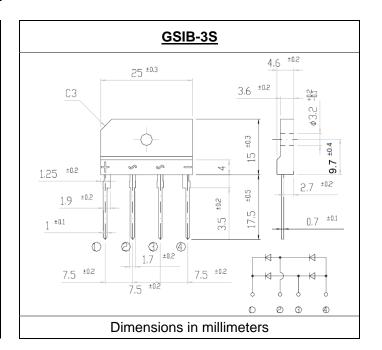
Terminal: Plated leads solderable per MIL-STD 750,

Method 2026

Case: UL-94 Class V-0 recognized Flame Retardant Epoxy

Polarity: Polarity symbol marked on body

Mounting position: any



## **MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

(single-phase, half -wave, 60Hz, resistive or inductive load rating at 25°C, unless otherwise stated)

	Symbol	G10X B05H	G10X B10H	G10X B20H	G10X B40H	G10X B60H	G10X B80H	G10X B100H	units
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 $Tc = 112^{\circ}C(Note 1)$ Rectified output current at $Ta = 25^{\circ}C(Note 2)$	If(av)	10.0 2.9							Α
Peak forward surge current 10ms single sine-wave superimposed on rated load	Ifsm	170						Α	
Maximum instantaneous forward voltage drop per leg at 5.0A	Vf	1.05						V	
Rating for fusing (t < 10.0ms)	l <sup>2</sup> t	110						A <sup>2</sup> Se	
Maximum DC reverse current at $Ta = 25^{\circ}C$ rated DC blocking voltage per leg $Ta = 125^{\circ}C$	lr	10.0 250							μА
Maximum thermal resistance per leg (Note2) (Note1)	Rth(ja) Rth(jc)	26.0 1.9							°C/M
Operating junction and storage temperature range	Tj, Tstg	-55 to +150						$^{\circ}\!\mathbb{C}$	

### Note:

- 1. junction to case, with heatsink
- 2. junction to ambient, without heatsink
- 3. Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw

#### RATINGS AND CHARACTERISTIC CURVES G10XB05H THRU G10XB100H

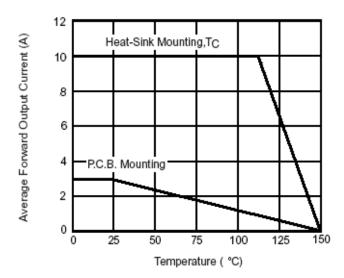


Figure 1. Derating Curve Output Rectified Current

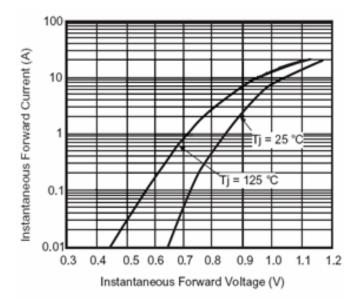


Figure 3. Typical Forward Characteristics Per Leg

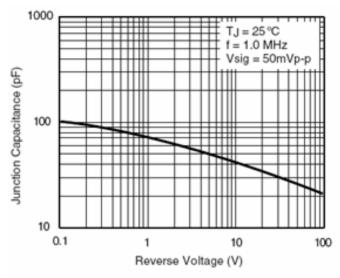


Figure 5. Typical Junction Capacitance Per Leg

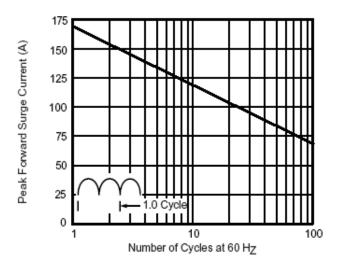


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg

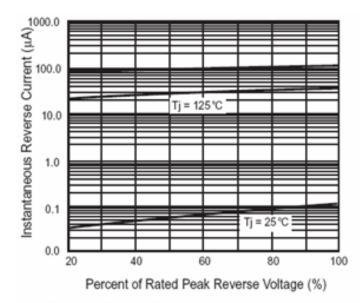


Figure 4. Typical Reverse Characteristics Per Leg

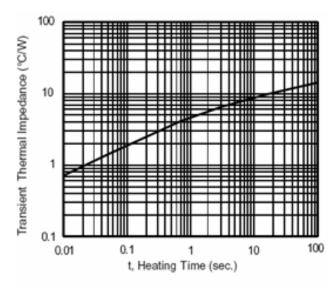


Figure 6. Typical Transient Thermal Impedance