

G10XB05-02-70A THRU G10XB100-02-70A

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

Voltage: 50 to 1000V

Current: 10.0A

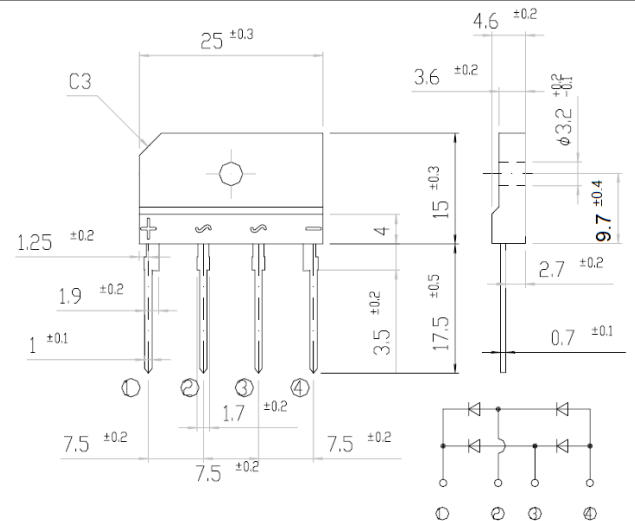
Features

Glass passivated chip junction
Ideal for printed circuit board
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 J-STD-002
Case: UL-94 Class V-0 recognized Flame Retardant Epoxy
Polarity: Polarity symbol marked on body
Mounting position: any
Marking: G10B05 Thru G10B100

GSIB-3S



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	Symbol	G10X B05-0 2-70A	G10X B10-0 2-70A	G10X B20-0 2-70A	G10X B40-0 2-70A	G10X B60-0 2-70A	G10X B80-0 2-70A	G10X B100-0 2-70A	units
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 output current at T _c = 100°C (Note 1) Ta = 25°C (Note 2)	I _{f(av)}	10.0 2.7							A
Peak forward surge current 10ms single sine-wave superimposed on rated load	I _{fsm}	120							A
Maximum instantaneous forward voltage drop per leg at 5.0A	V _f	1.0							V
Maximum DC reverse current at rated DC blocking voltage per leg Ta = 25°C Ta = 125°C	I _r	10 500							μA
Maximum thermal resistance per leg (Note3)	R _{th(jc)}	1.4							°C/W
Operating junction and storage temperature range	T _j , T _{stg}	-55 to +150							°C

Note:

1. junction to case, with heatsink
2. junction to ambient, without heatsink
3. Thermal Resistance from Junction to Case with Device Mounted on 75mm × 75mm × 1.6mm Cu Plate Heatsink

RATINGS AND CHARACTERISTIC CURVES G10XB05-02-70A THRU G10XB100-02-70A

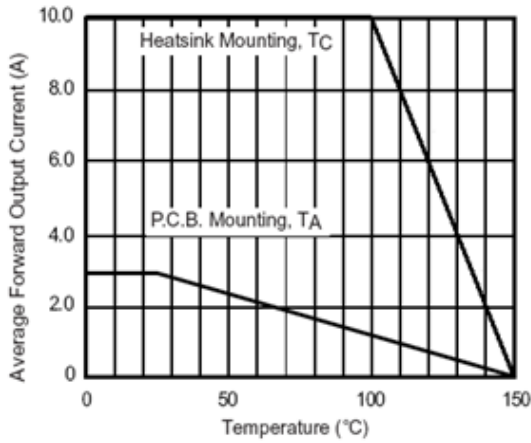


Figure 1. Derating Curve Output Rectified Current

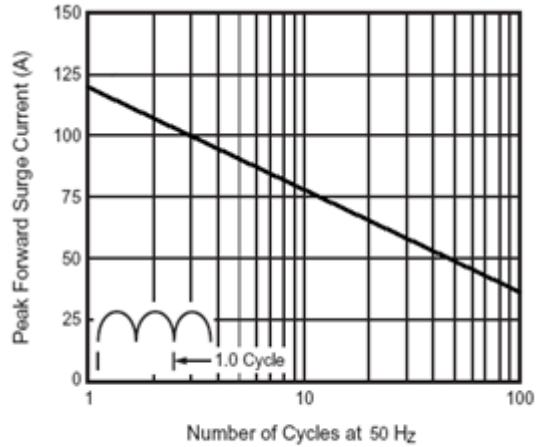


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg

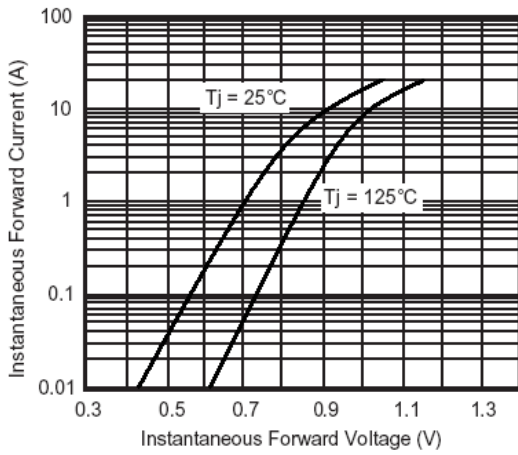


Figure 3. Typical Forward Characteristics Per Leg

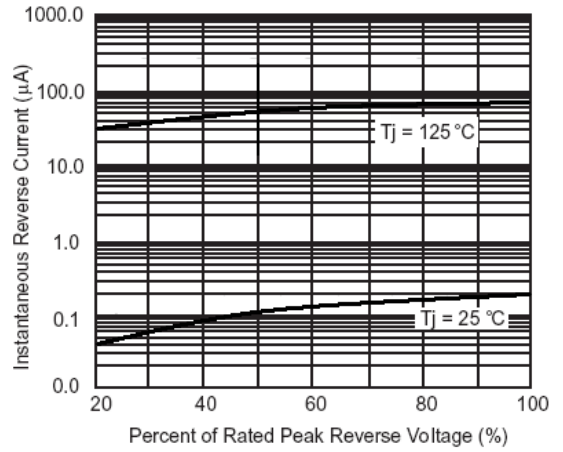


Figure 4. Typical Reverse Characteristics Per Leg

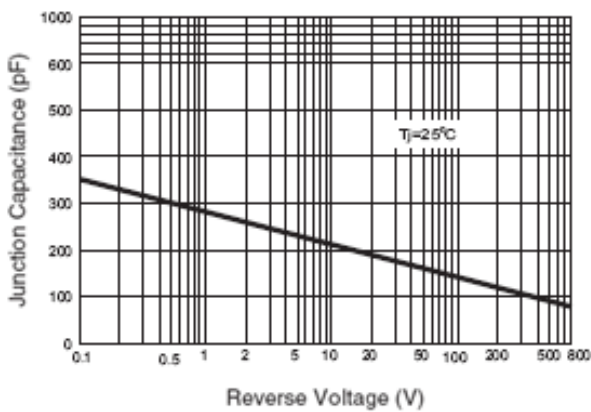


Figure 5. Typical Junction Capacitance Per Leg

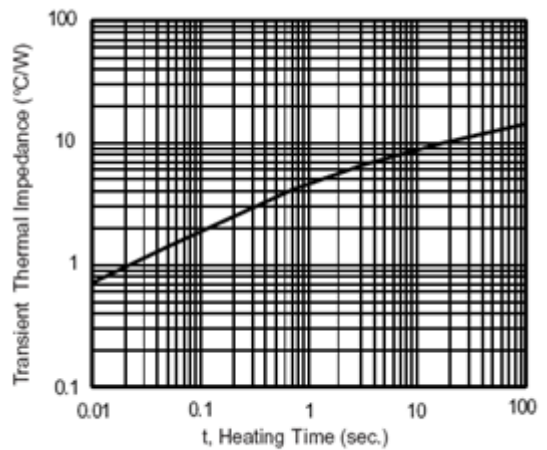


Figure 6. Typical Transient Thermal Impedance

Fig. 7 — Maximum Non-Repetitive Peak Forward Surge Current

