LS6XB60

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

Voltage: 600V Current: 6.0A

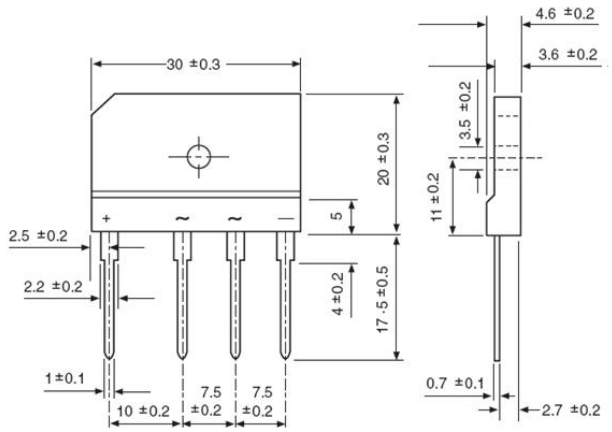
Features

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

GSIB-5S



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	LS6XB60	units
Maximum repetitive peak reverse voltage	Vrrm	600	V
Maximum RMS voltage	Vrms	420	V
Maximum DC blocking voltage	Vdc	600	V
Maximum average forward Tc = 100℃(Note 2) Rectified output current at Ta = 25℃(Note32)	If(av)	6.0 2.8	A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	Ifsm	200	A
Maximum instantaneous forward voltage drop per leg at 3.0A	Vf	0.95	V
Rating for fusing (t < 8.3ms)	I^2t	135	A^2Sec
Maximum DC reverse current at Ta = 25°C rated DC blocking voltage per leg Ta = 125°C	Ir	10.0 250	μA
Maximum Reverse Recovery Time (Note1)	Trr	1000	nS
Maximum thermal resistance per leg (Note3) (Note2)	Rth(ja) Rth(jc)	22.0 3.4	℃/W
Operating junction and storage temperature range	Tj, Tstg	-55 to +150	℃

Note:
1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
2. Unit case mounted on Al plate heatsink
3. Unit case mounted on P.C.B. with 0.5 x 0.5" (12 x 12mm) copper peads and 0.375"(9.5mm) lead length
4. Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw

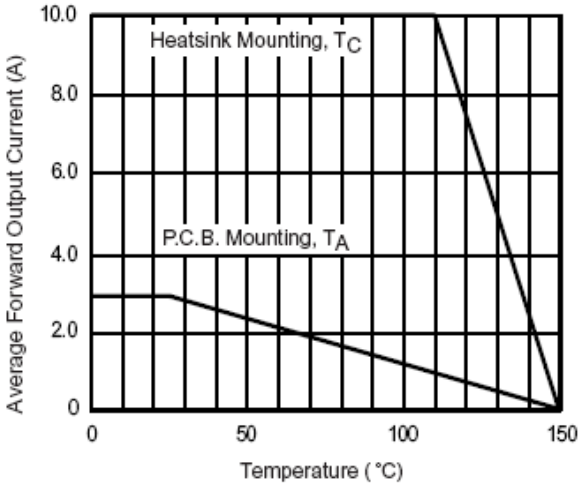


Figure 1. Derating Curve Output Rectified Current

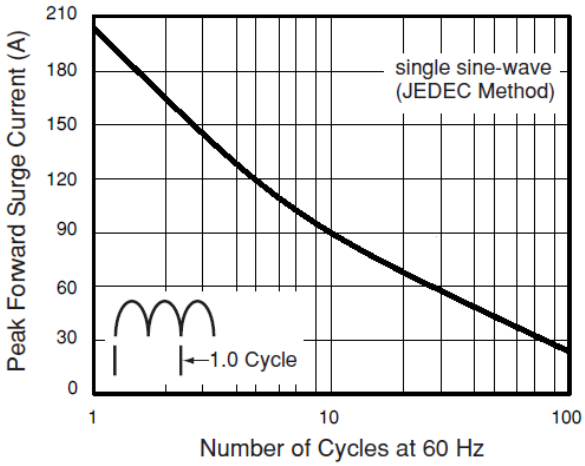


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Leg

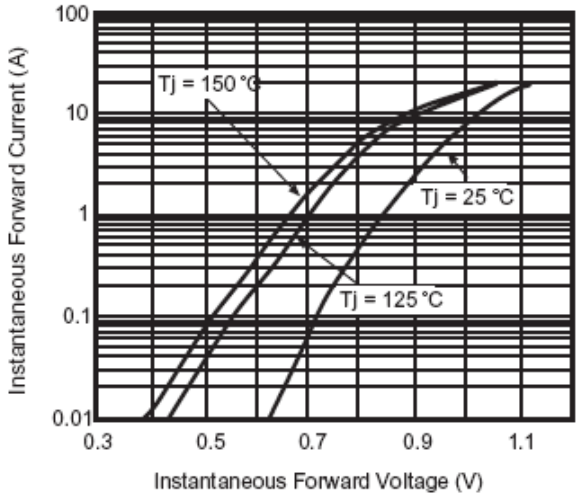


Figure 3. Typical Forward Characteristics Per Leg

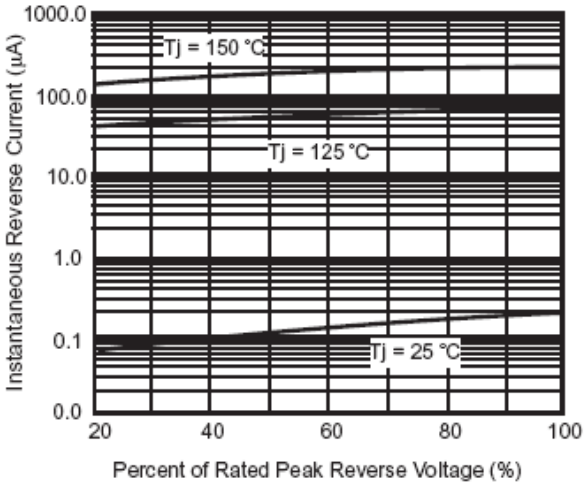


Figure 4. Typical Reverse Characteristics Per Leg

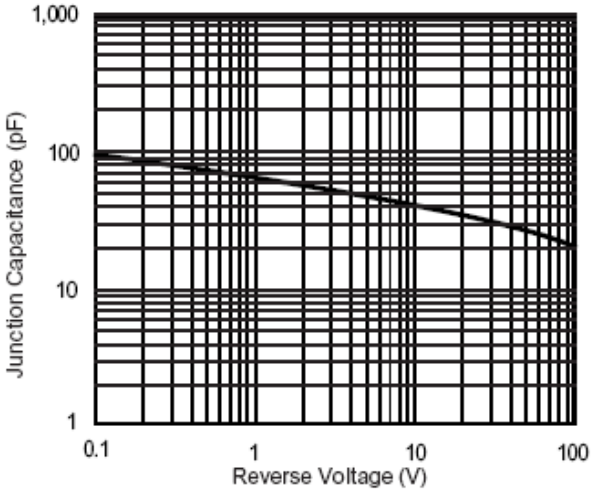


Figure 5. Typical Junction Capacitance Per Leg

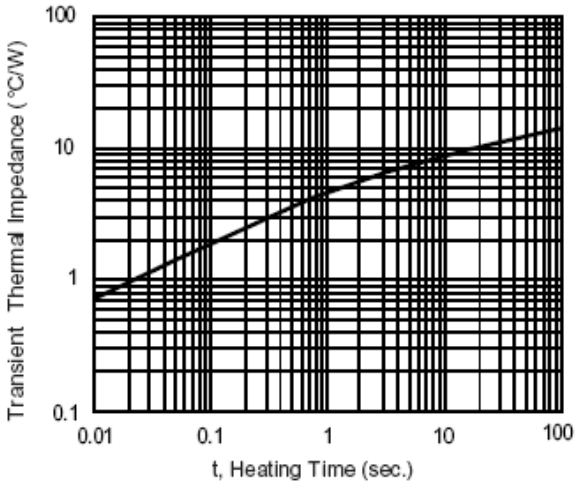


Figure 6. Typical Transient Thermal Impedance