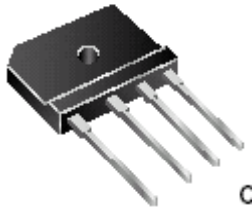


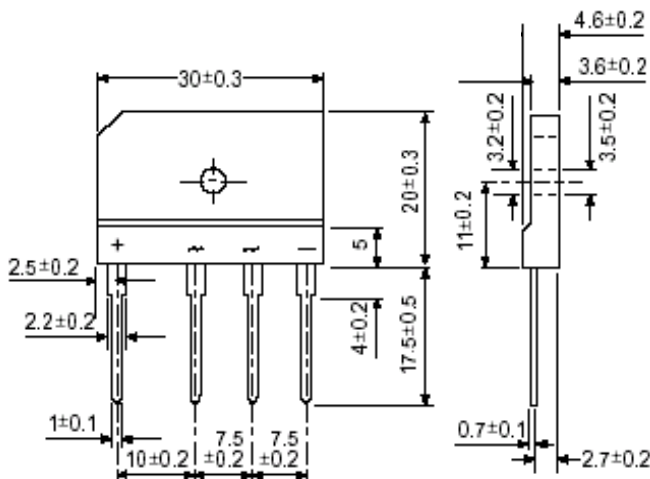
Glass Passivated Single-Phase Bridge Rectifier

Reverse Voltage 600 and 1000V

Forward Current 35A



Case Style: GBJ (5S)



Dimensions in millimeters

Features

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ High case dielectric strength of 2500 V_{RMS}
- ◆ Ideal for printed circuit boards
- ◆ Glass passivated chip junction
- ◆ High surge current capability

Mechanical Data

Case: GBJ(5S) Molded plastic body

Terminals: Plated leads solderable per MIL-STD-750, Method 2026

High temperature soldering guaranteed:
 260°C/10 seconds, 0.375 (9.5mm) lead length,
 5lbs.(2.3kg) tension

Mounting Position: Any⁽³⁾

Mounting Torque: 8 in. - lb. max.

Weight: 0.24 oz., 6.8 g

Maximum Ratings & Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	GBJ35J	GBJ35K	GBJ35M	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	600	800	1000	V
Maximum RMS voltage	V _{RMS}	420	560	700	V
Maximum DC blocking voltage	V _{DC}	600	800	1000	V
Maximum average forward rectified output current at TC=98°C TA=25°C	I _{F(AV)}		35 ⁽¹⁾ 3.8 ⁽²⁾		A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}		450		A
Rating for fusing (t<8.3ms)	I ² t		840		A ² sec
Maximum instantaneous forward voltage drop per leg at 17.5A	V _F		1.05		V
Maximum DC reverse current at rated DC blocking voltage per leg TA=25°C TA=125°C	I _R		5 150		μA
Typical thermal resistance per leg	R _{θJA} R _{θJC}		22 ⁽²⁾ 1.5 ⁽¹⁾		°C/W
Dielectric strength (Terminals to case, AC 1 minute)	V _{dis}		2500		V
Operating junction temperature range	T _J		-55 to +150		°C
Storage temperature range	T _{STG}		-55 to +150		°C

Notes:

(1) Unit case mounted on AL plate heatsink

(2) Unit mounted on P.C.B.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 Characteristics Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

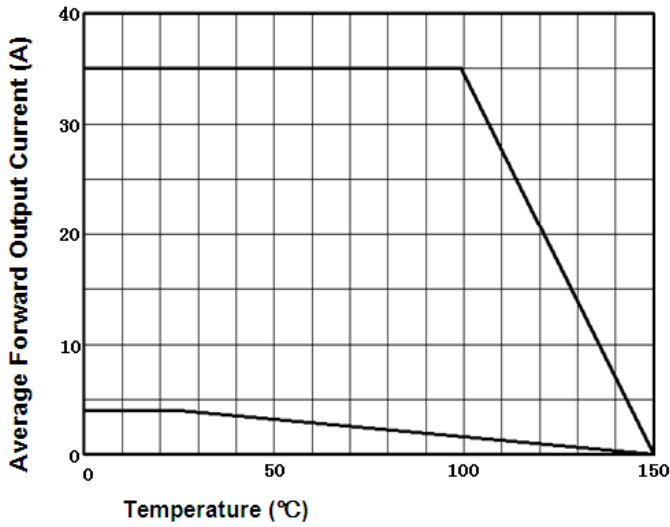


Figure 1. Derating Curve Output Rectified Current

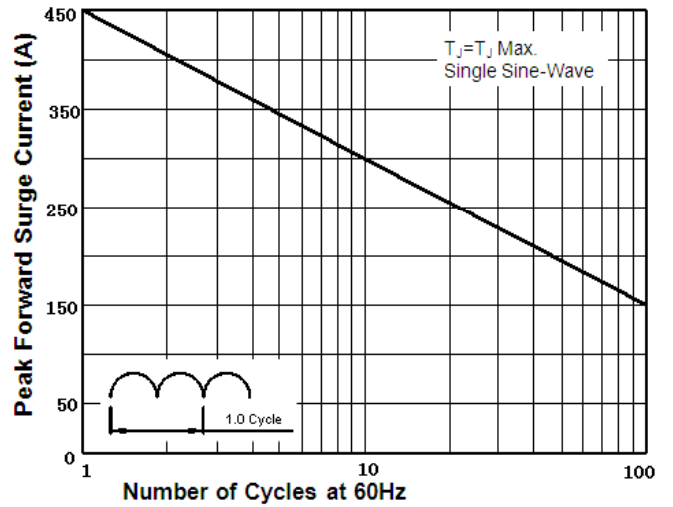


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current per Diode

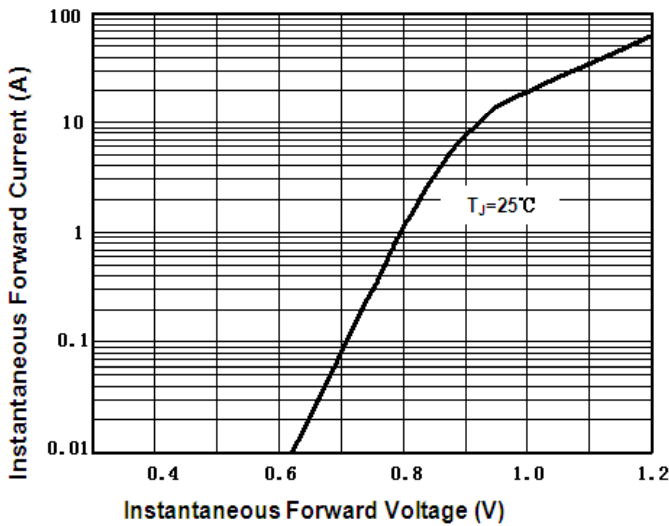


Figure 3. Typical Forward Characteristics Per Diode

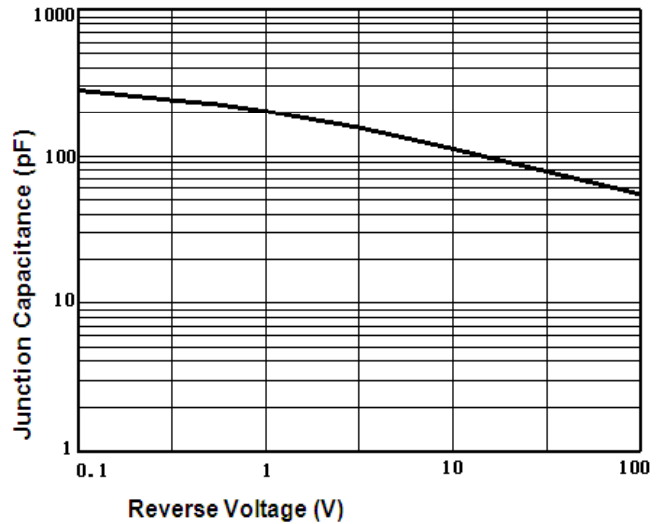


Figure 4. Typical Junction Capacitance Per Diode

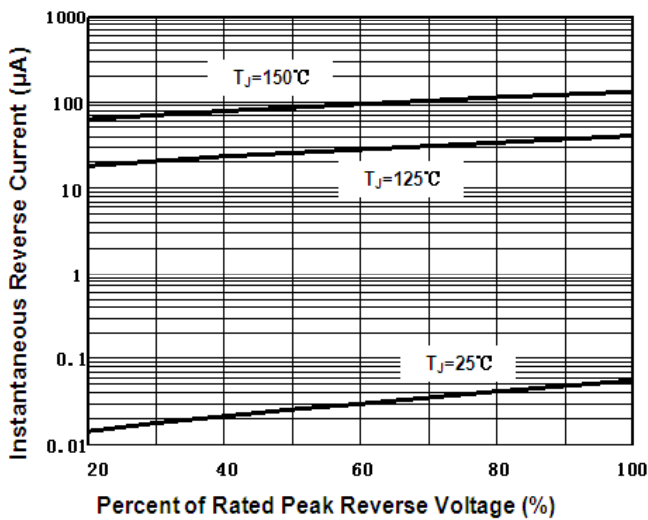


Figure 5. Typical Reverse Characteristics Per Diode