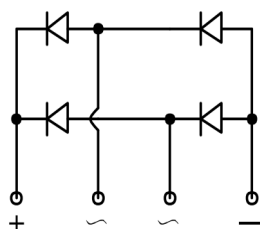
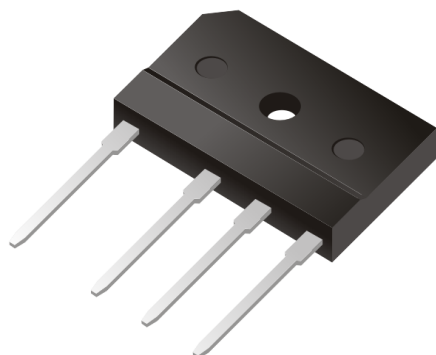


Bridge Rectifiers

GBJ



Reverse Voltage - 1000 V

Forward Current - 15 A

Features

- Glass passivated chip
- Thin single in-line package
- High surge current capability
- High reliability
- Low forward voltage drop

Typical Applications

General purpose use in AC/DC bridge full wave rectification for switching power supply, home appliances, office equipment, industrial automation applications.

Mechanical Data

- **Package:** GBJ
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** As marked on body

Maximum Ratings ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	GBJ1510
Repetitive peak reverse voltage	VRRM	V	1000
Average rectified output current @60Hz sine wave, R-load	IO	A	With heatsink $T_c=105^{\circ}\text{C}$ 15
			Without heatsink $T_a=25^{\circ}\text{C}$ 3.5
Surge(non-repetitive)forward current @60HZ half sine wave, 1 cycle, $T_j=25^{\circ}\text{C}$	IFSM	A	250
Current squared time @1ms≤t≤8.3ms $T_j=25^{\circ}\text{C}$, Rating of per diode	I ² t	A ² S	260
Storage temperature	Tstg	°C	-55 ~+150
Junction temperature	Tj	°C	-55 ~+150
Dielectric strength @ terminals to case, AC 1 minute	Vdis	KV	2.5
Mounting torque @recommend torque: 5kg·cm	Tor	kg·cm	8

Electrical Characteristics ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	GBJ1510
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =7.5 A	1.00
Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM}	μA	V _{RRM} 25 °C	5.0
			125 °C	100

Thermal Characteristics ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	GBJ1510
Thermal Resistance	Between junction and ambient, Without heatsink	RθJ-A	18
	Between junction and case, With heatsink	RθJ-C	1.5

Fig.1 Typical Forward Current Derating Curve

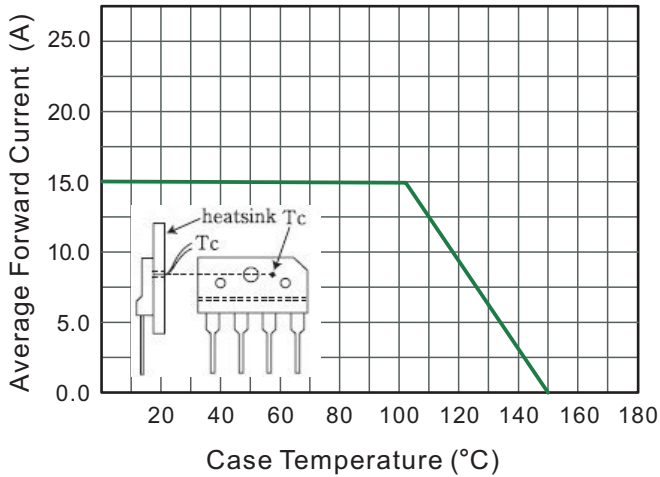


Fig.2 Typical Reverse Characteristics

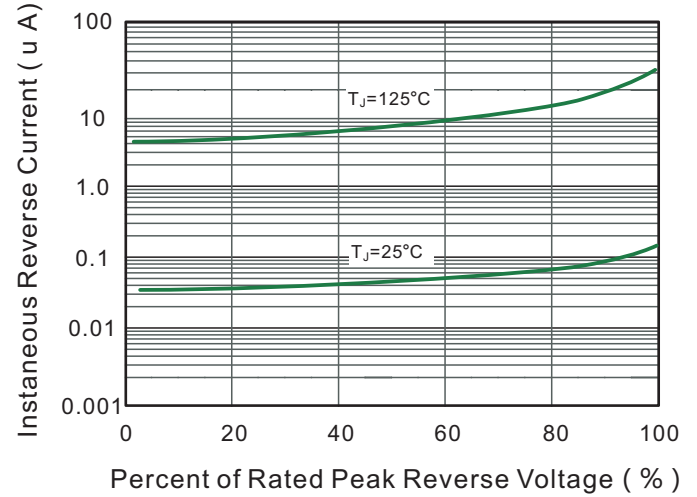


Fig.3 Typical Forward Characteristics

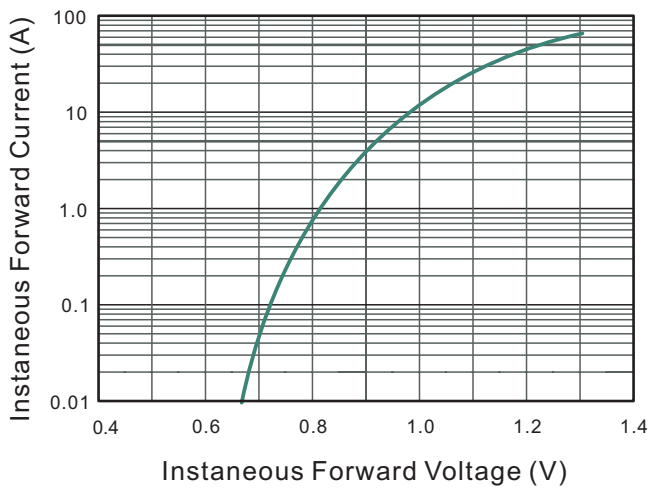
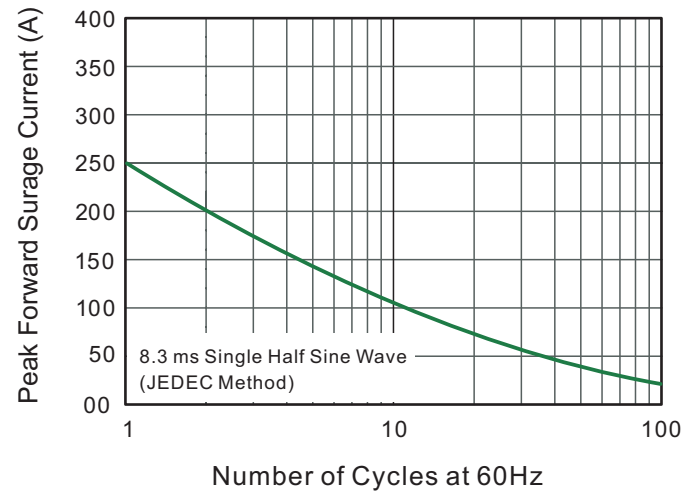


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



Package Outline Dimensions inches and (millimeters)

