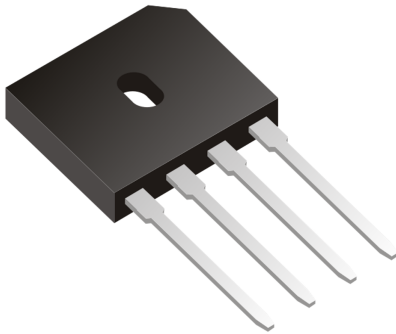


Reverse Voltage 50~1000 V

Forward Current 20.0A

Features

- Ideal for printed circuit boards
- High surge current capability
- Solder dip 260 °C max. 10s, per JESD 22-B106

Mechanical Data

- **Package:** GBU
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

Typical Applications

General purpose use in AC/DC bridge full wave rectification for monitor, TV, printer, power supply, switching mode power supply, adapter, audio equipment, and home appliances applications.

■ **Maximum Ratings** (T_a=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	GBU20005	GBU2001	GBU2002	GBU2004	GBU2006	GBU2008	GBU2010
Device marking code				GBU20005	GBU2001	GBU2002	GBU2004	GBU2006	GBU2008	GBU2010
Repetitive peak reverse voltage		VRRM	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load	With heatsink Tc =90℃	IO	A	20.0						
	Without heatsink Ta =25℃			3.5						
Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, Tj=25℃		IFSM	A	250						
Current squared time @1ms≤t≤8.3ms Tj=25℃, Rating of per diode		I²t	A²S	260						
Storage temperature		Tstg	℃	-55 ~+150						
Junction temperature		Tj	℃	-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℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	GBU20005	GBU2001	GBU2002	GBU2004	GBU2006	GBU2008	GBU2010
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =10 A	1.00						
Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM}	μA	V _{RM} =V _R RM	5						

■ Thermal Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	GBU20005	GBU2001	GBU2002	GBU2004	GBU2006	GBU2008	GBU2010
Thermal Resistance	Between junction and ambient, Without heatsink	R θ J-A	°C/W	25.0						
	Between junction and case, With heatsink	R θ J-C		1.5						

■ Characteristics Curves

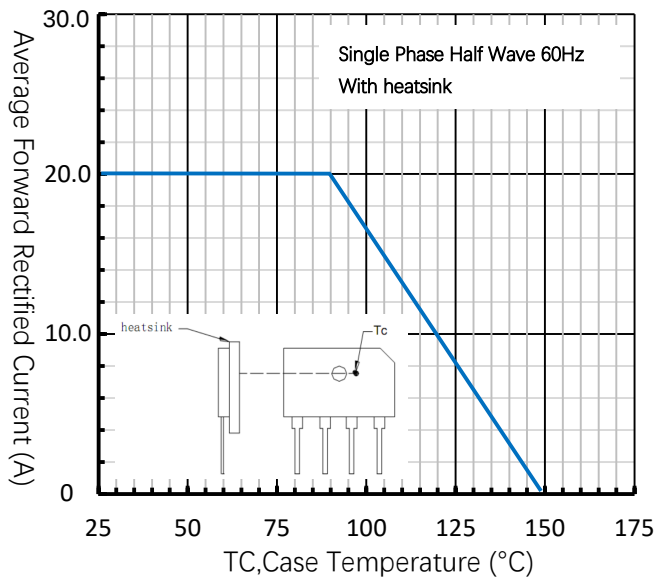


Fig.1 Forward Current Derating Curve

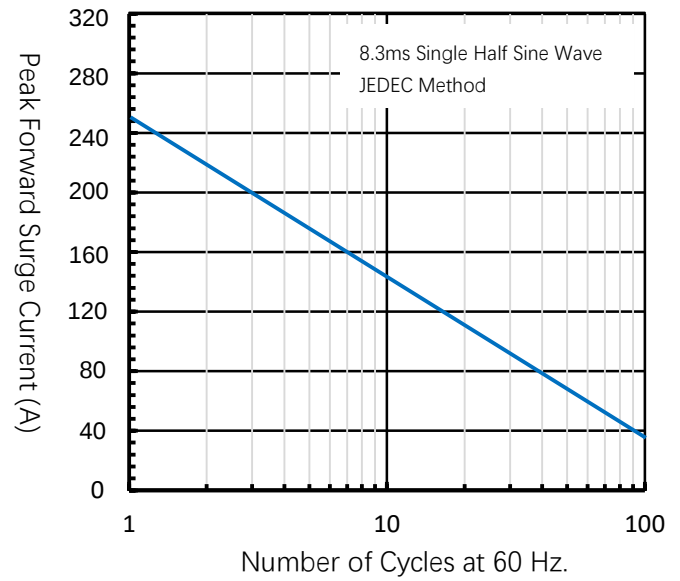


Fig.2 Forward Surge Current Capability

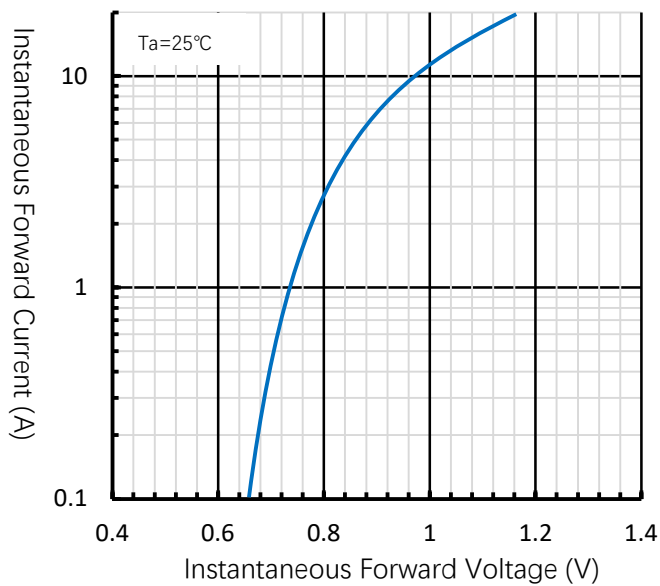


Fig. 3 Typical Forward Characteristic

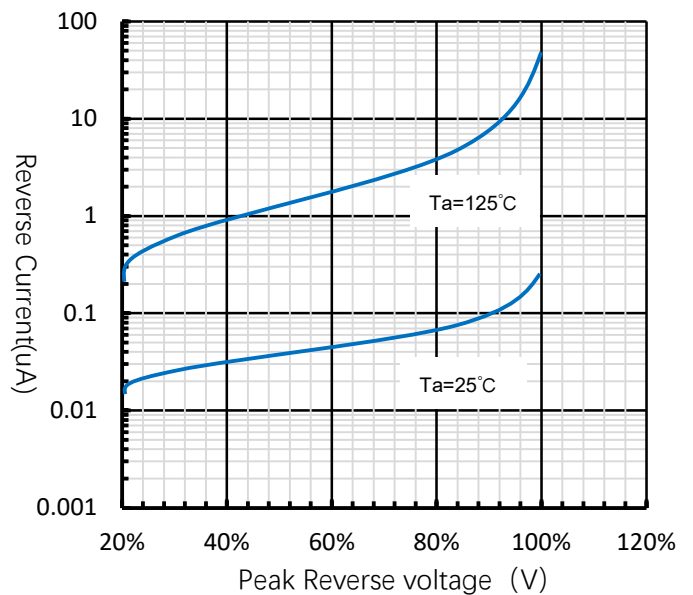


Fig. 4 Typical Reverse Characteristics

■ Outline Dimensions Dimensions in inches and (millimeters)

Package: GBU

