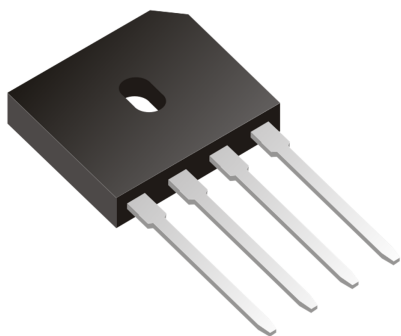


Features

- Low forward voltage
- 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	GBU1006L
Device marking code				GBU1006L
Repetitive peak reverse voltage		VRRM	V	600
Average rectified output current @60Hz sine wave, R-load	With heatsink T _c =100°C	I _O	A	10.0
	Without heatsink T _a =25°C			3.2
Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, T _j =25°C		I _{FSM}	A	200
Current squared time @1ms≤t≤8.3ms T _j =25°C, Rating of per diode		I ² t	A ² S	166
Storage temperature		T _{stg}	°C	-55 ~+150
Junction temperature		T _j	°C	-55 ~+150
Dielectric strength @terminals to case, AC 1 minute		V _{dis}	KV	2.5
Mounting torque @recommend torque: 5kg·cm		Tor	kg·cm	8

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	GBU1006L
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =1.0A	0.82
			I _{FM} =3.0A	0.87
			I _{FM} =5.0A	0.92
Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM}	μA	V _{RM} =VRRM	5

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

PARAMETER		SYMBOL	UNIT	GBU1006L
Thermal Resistance	Between junction and ambient, Without heatsink	R _{θJ-A}	°C/W	23.0
	Between junction and case, With heatsink	R _{θJ-C}		1.9

■ Characteristics Curves

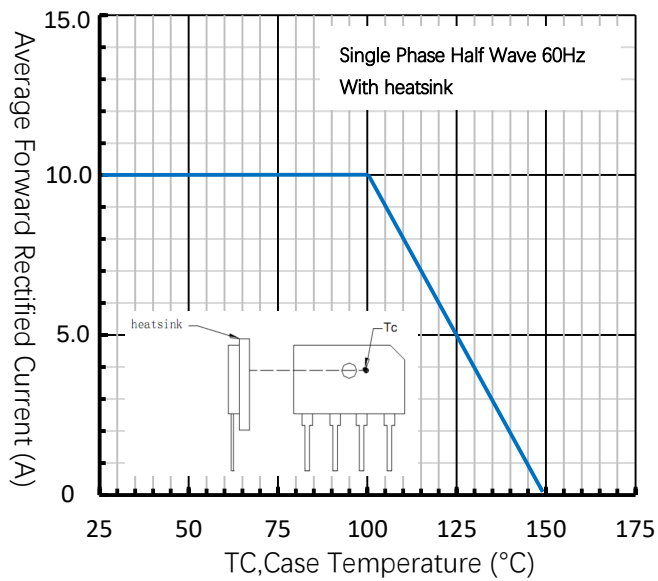


Fig.1 Forward Current Derating Curve

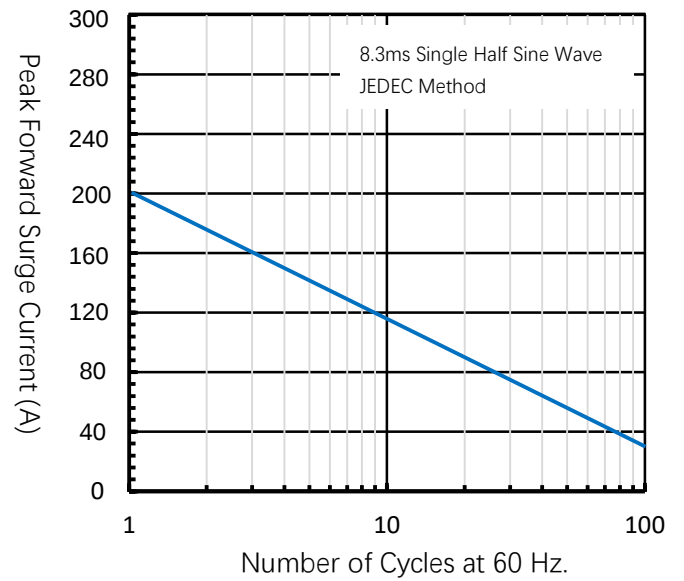


Fig.2 Forward Surge Current Capability

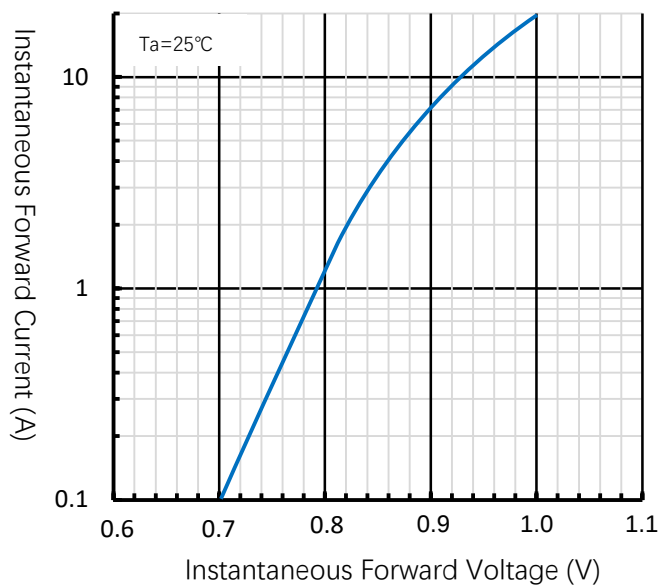


Fig. 3 Typical Forward Characteristic

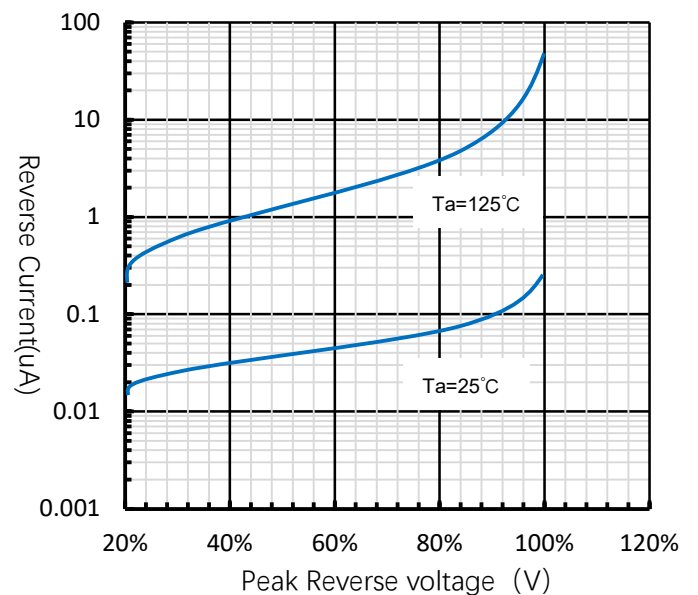


Fig. 4 Typical Reverse Characteristics

■ Outline Dimensions Dimensions in inches and (millimeters)

Package: GBU

