

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

PARAMETER	SYMBOL	UNIT	GBU1506L
Device marking code			GBU1506L
Repetitive peak reverse voltage	VRRM	V	600
Average rectified output current @60Hz sine wave, R-load	IO	A	15.0
With heatsink $T_c = 100^\circ\text{C}$			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 @ $1\text{ms} \leq t \leq 8.3\text{ms}$ $T_j=25^\circ\text{C}$, Rating of per diode	I^2t	A^2s	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	GBU1506L
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=1.0A	0.81
			IFM=3.0A	0.86
			IFM=7.5A	0.92
Maximum DC reverse current at rated DC blocking voltage per diode	IRRM	μA	VRM=VRRM	5

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

PARAMETER	SYMBOL	UNIT	GBU1506L
Thermal Resistance	Between junction and ambient, Without heatsink	RθJ-A	23.0
	Between junction and case, With heatsink		1.9

■ Characteristics Curves

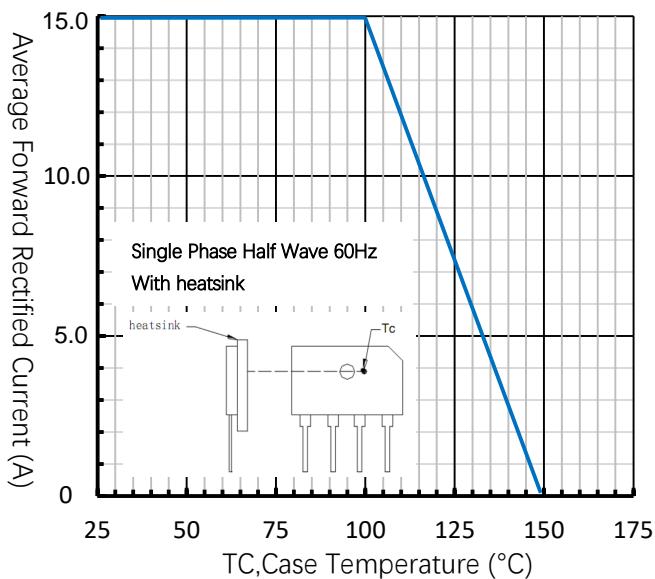


Fig.1 Forward Current Derating Curve

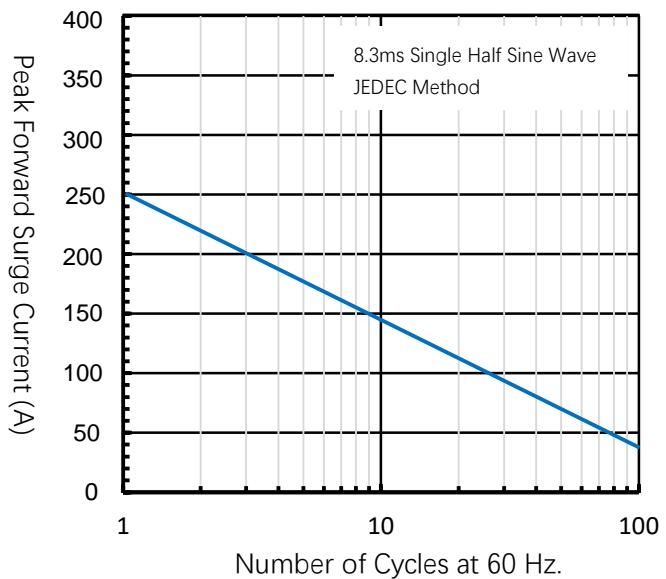


Fig.2 Forward Surge Current Capability

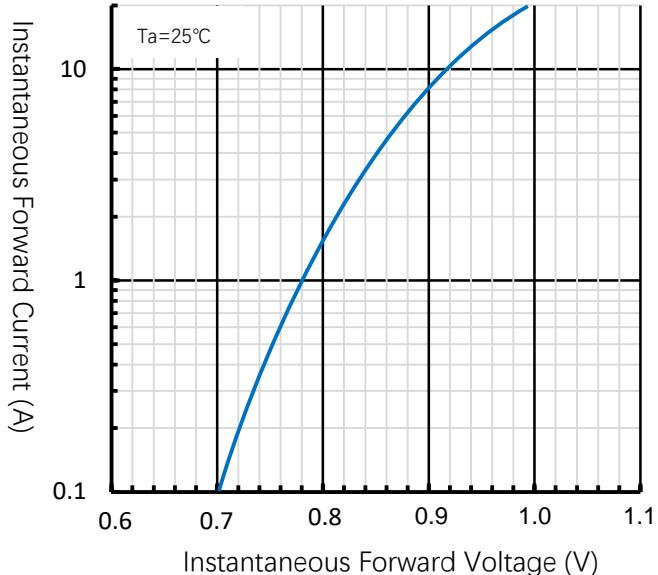


Fig. 3 Typical Forward Characteristic

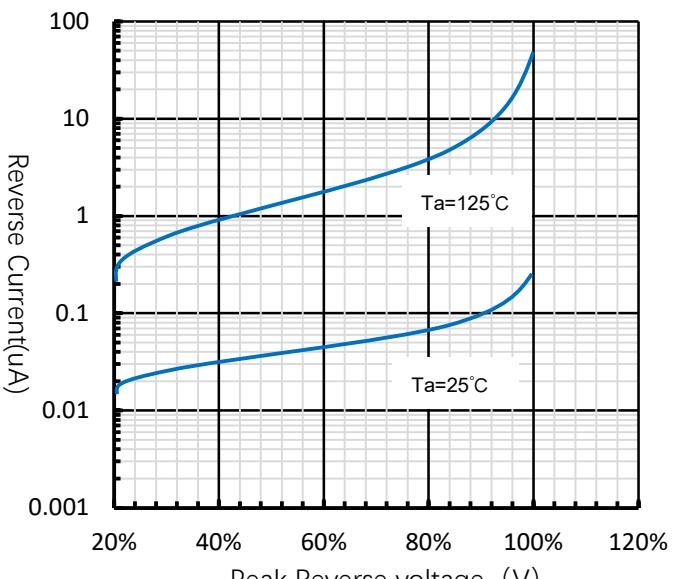


Fig. 4 Typical Reverse Characteristics

■ Outline Dimensions Dimensions in inches and (millimeters)**Package: GBU**