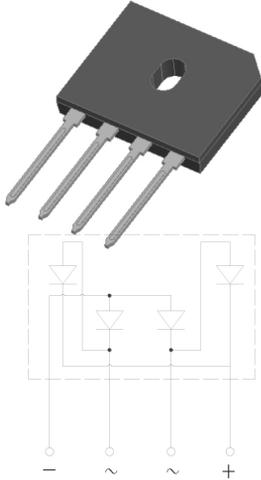


## Bridge Rectifier



### Features

- UL recognition, file #E230084
- Ideal for printed circuit boards
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

### 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.

### 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

### ■Maximum Ratings (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	GBU15005	GBU1501	GBU1502	GBU1504	GBU1506	GBU1508	GBU1510
Device marking code			GBU15005	GBU1501	GBU1502	GBU1504	GBU1506	GBU1508	GBU1510
Repetitive peak reverse voltage	VRRM	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load	With heatsink T <sub>c</sub> =100°C	IO	A	15.0					
	Without heatsink T <sub>a</sub> =25°C			3.2					
Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, T <sub>J</sub> =25°C	IFSM	A	200						
Current squared time @1ms≤t≤8.3ms T <sub>J</sub> =25°C, Rating of per diode	I <sup>2</sup> t	A <sup>2</sup> S	166						
Storage temperature	T <sub>stg</sub>	°C	-55 ~+150						
Junction temperature	T <sub>J</sub>	°C	-55 ~+150						
Dielectric strength @terminals to case, AC 1 minute	V <sub>dis</sub>	KV	2.5						
Mounting torque @recommend torque: 5kg·cm	Tor	kg·cm	8						

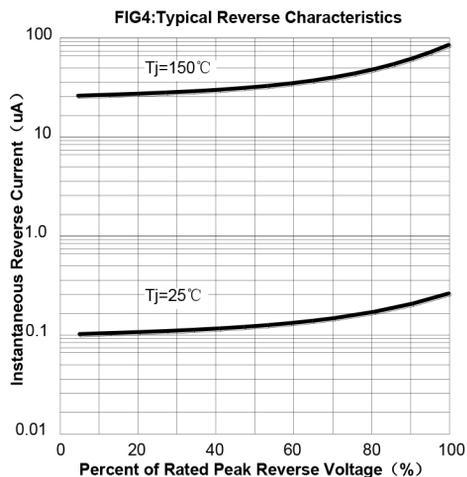
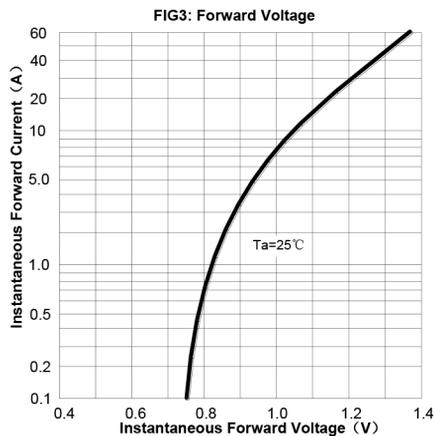
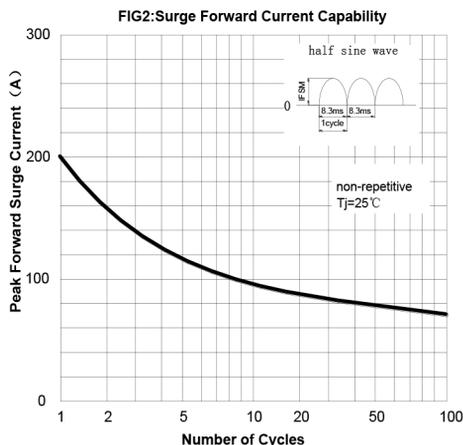
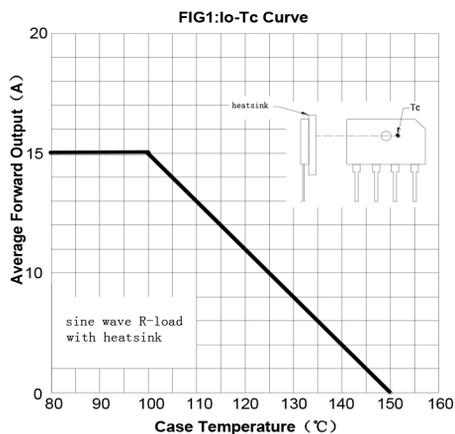
### ■Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	GBU15005	GBU1501	GBU1502	GBU1504	GBU1506	GBU1508	GBU1510
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	IFM=7.5A	1.00						
Maximum DC reverse current at rated DC blocking voltage per diode	IRR <sub>M</sub>	µA	VRM=VRRM	5						

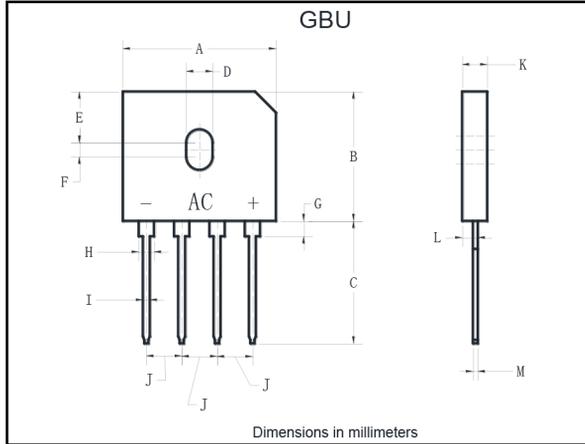
## ■ Thermal Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	GBU15005	GBU1501	GBU1502	GBU1504	GBU1506	GBU1508	GBU1510
Thermal Resistance	Between junction and ambient, Without heatsink	R <sub>θJ-A</sub>	°C/W	23.0						
	Between junction and case, With heatsink	R <sub>θJ-C</sub>		1.8						

## ■ Characteristics (Typical)



■ Outline Dimensions



GBU		
Dim	Min	Max
A	21.80	22.30
B	18.30	18.80
C	17.50	18.00
D	3.50	4.10
E	7.40	7.90
F	1.65	2.16
G	1.91	2.54
H	2.06	2.54
I	1.02	1.27
J	4.83	5.33
K	3.30	3.56
L	2.40	2.66
M	0.46	0.56