

■ **FEATURES**

- UL recognition, file #E230084
- Glass passivated chip junction
- 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** ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	GBU15005A	GBU1501A	GBU1502A	GBU1504A	GBU1506A	GBU1508A	GBU1510A
Device marking code			GBU15005A	GBU1501A	GBU1502A	GBU1504A	GBU1506A	GBU1508A	GBU1510A
Maximum Repetitive Peak Reverse Voltage	VRRM	V	50	100	200	400	600	800	1000
Maximum RMS Voltage	VRMS	V	35	70	140	280	420	560	700
Maximum DC blocking Voltage	VDC	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load	With heatsink $T_c = 100^{\circ}\text{C}$	IO	A	15.0					
	Without heatsink $T_a = 25^{\circ}\text{C}$			3.2					
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, $T_j = 25^{\circ}\text{C}$	IFSM	A	250						
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, $T_j = 25^{\circ}\text{C}$			500						
Current squared time @1ms $\leq t \leq$ 8.3ms $T_j = 25^{\circ}\text{C}$, Rating of per diode	I ² t	A ² S	260						
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	GBU15005A	GBU1501A	GBU1502A	GBU1504A	GBU1506A	GBU1508A	GBU1510A
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =7.5A				1.0			
Maximum DC reverse current at rated DC blocking voltage per diode	I _R	μA	T _j =25°C				5			
			T _j =125°C				100			
Typical junction capacitance	C _j	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C				80			

THERMAL CHARACTERISTICS (T_a=25°C Unless otherwise specified)

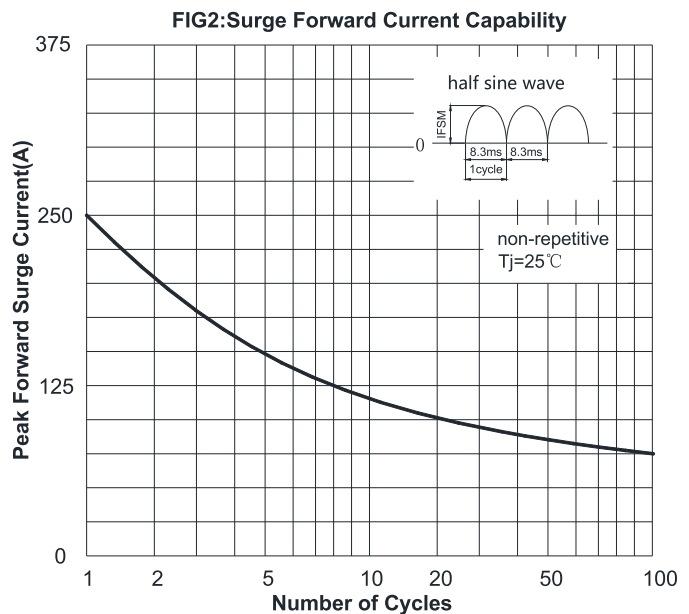
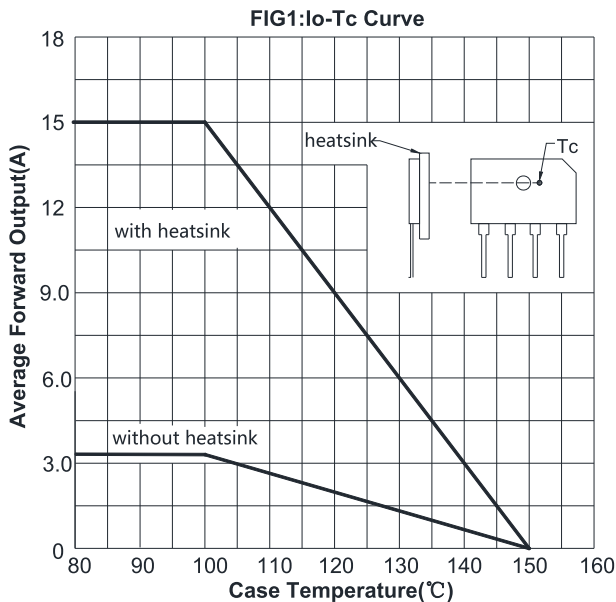
PARAMETER		SYMBOL	UNIT	GBU15005A	GBU1501A	GBU1502A	GBU1504A	GBU1506A	GBU1508A	GBU1510A
Thermal Resistance	Between junction and ambient, Without heatsink	R _{θJ-A}	°C/W				25.0			
	Between junction and case, With heatsink	R _{θJ-C}					1.8			

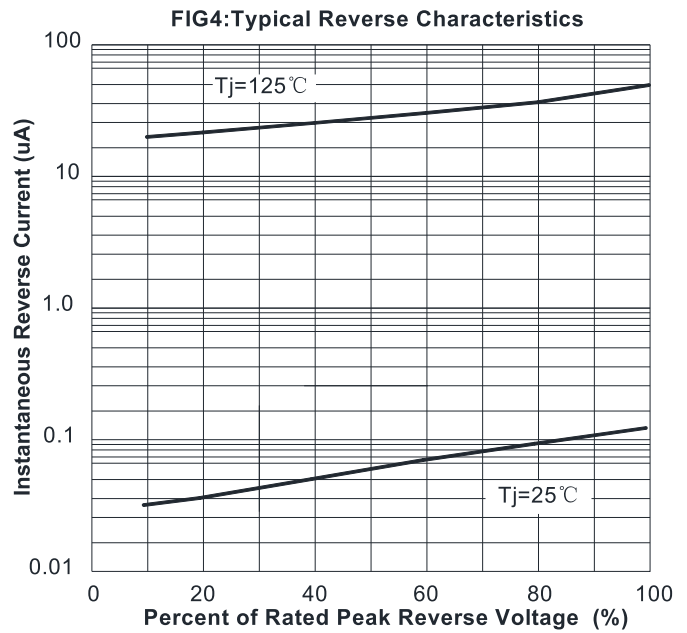
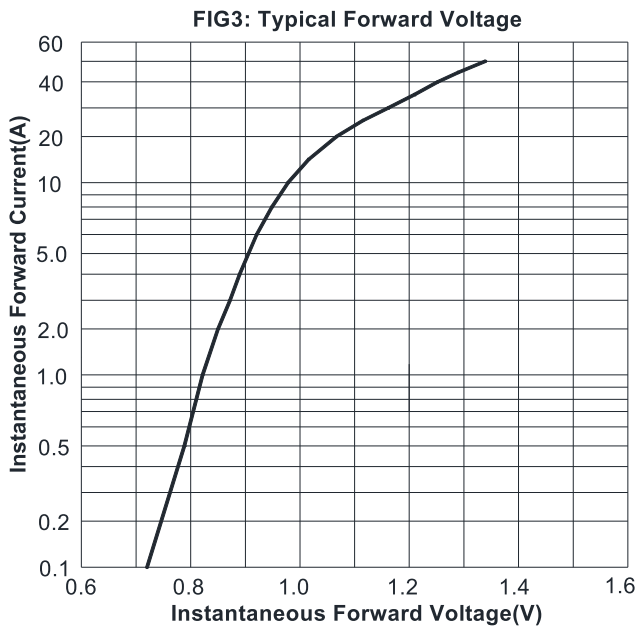
Note: Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

PACKAGING INFORMATION

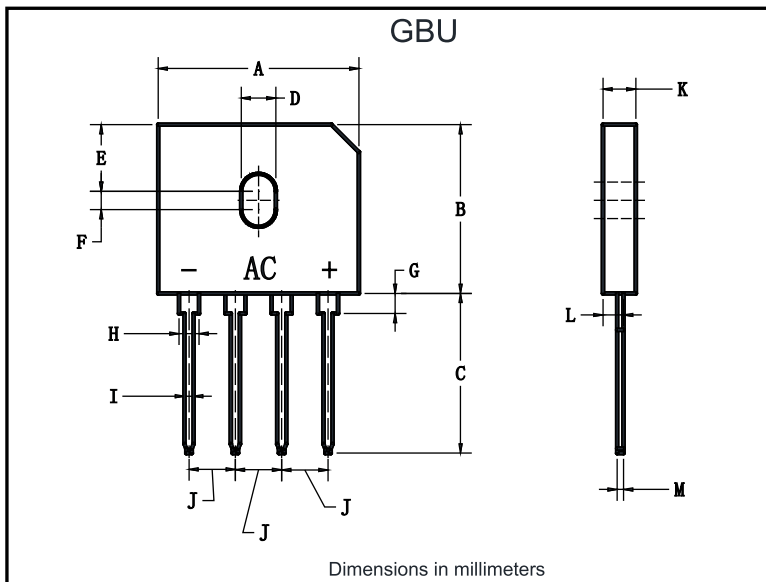
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GBU15005A THRU GBU1510A	B1	Approximate 3.97	20	1000	2000	TUBE

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