

■ **FEATURES**

- UL recognition, file #E230084
- Glass passivated chip junction
- Ideal for printed circuit boards
- High surge current capability
- Low VF
- 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	GBUL1006	GBUL1008
Device marking code			GBUL1006	GBUL1008
Maximum Repetitive Peak Reverse Voltage	VRRM	V	600	800
Maximum RMS Voltage	VRMS	V	420	480
Maximum DC blocking Voltage	VDC	V	600	800
Average rectified output current @60Hz sine wave, R-load	With heatsink $T_c = 113^{\circ}\text{C}$	IO	A	10
	Without heatsink $T_a = 25^{\circ}\text{C}$			3.6
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, $T_j = 25^{\circ}\text{C}$	IFSM	A	200	
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, $T_j = 25^{\circ}\text{C}$			400	
Current squared time @ $1\text{ms} \leq t \leq 8.3\text{ms}$ $T_j = 25^{\circ}\text{C}$, 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** ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	GBUL1006	GBUL1008
Maximum instantaneous forward voltage drop per diode	V_F	V	$I_{FM}=5.0\text{A}$	0.92	
Maximum DC reverse current at rated DC blocking voltage per diode	I_R	μA	$T_j=25^{\circ}\text{C}$	5	
			$T_j=125^{\circ}\text{C}$	100	
Typical junction capacitance	C_j	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	110	

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

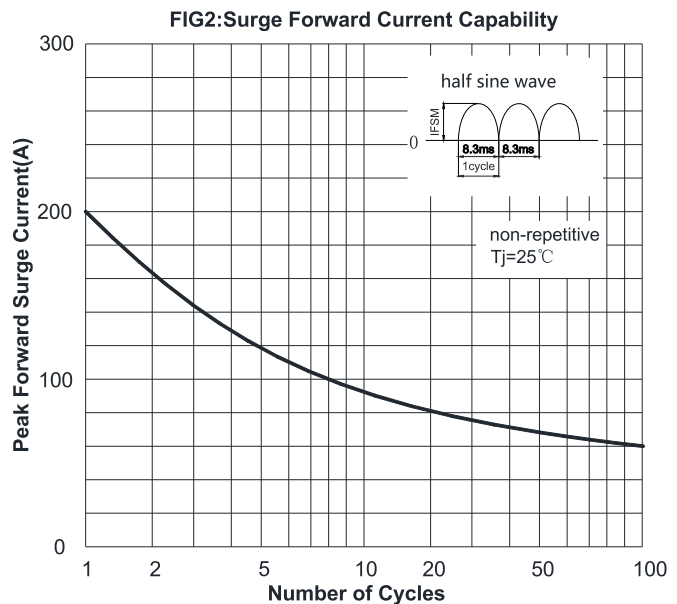
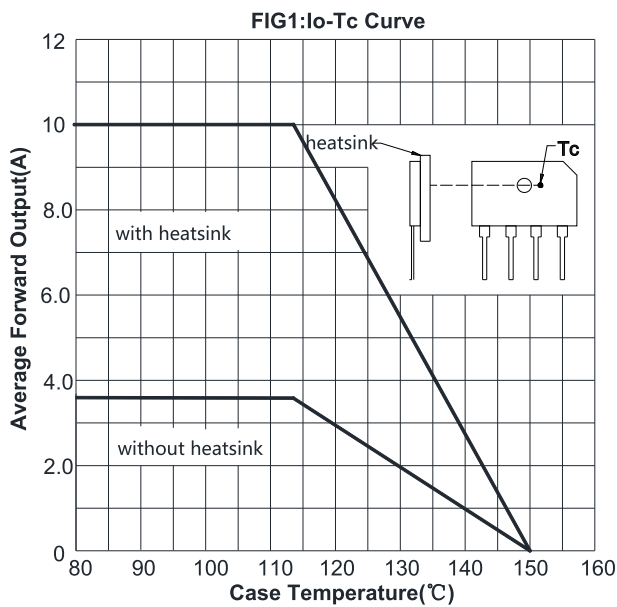
PARAMETER		SYMBOL	UNIT	GBUL1006	GBUL1008
Thermal Resistance	Between junction and ambient, Without heatsink	$R_{\theta J-A}$	$^{\circ}\text{C/W}$	25	
	Between junction and case, With heatsink	$R_{\theta J-C}$		2	

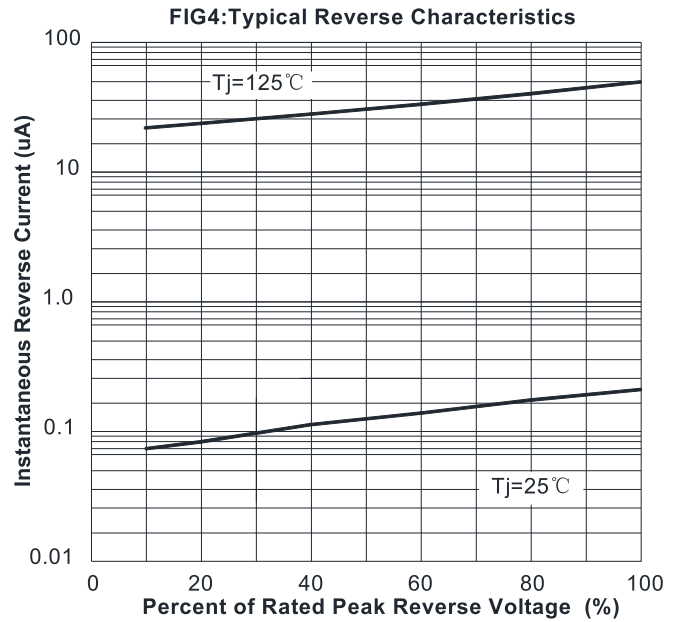
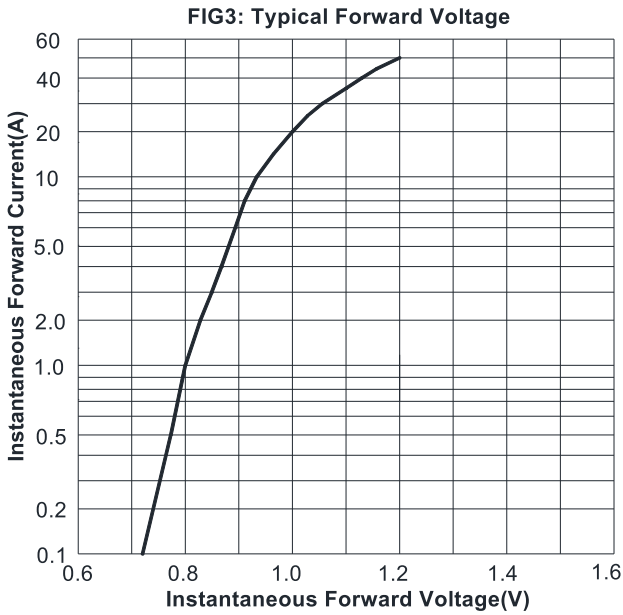
Note: Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

■ **PACKAGING INFORMATION**

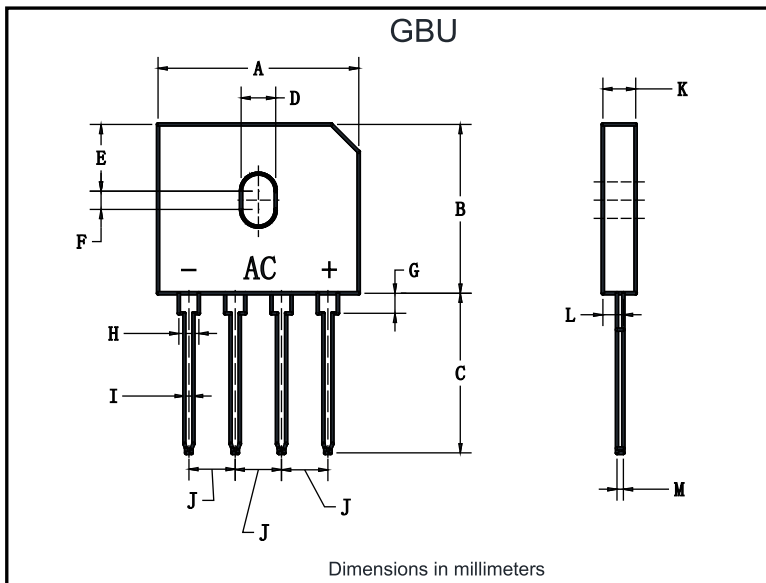
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GBUL1006 THRU GBUL1008	B1	Approximate 3.97	20	1000	2000	TUBE
GBUL1006 THRU GBUL1008	A1	Approximate 3.97	250	250	4000	BOX

■ **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