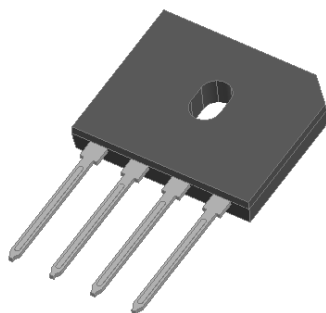


Features

- 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°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	GBU816
Device marking code				GBU816
Maximum Repetitive Peak Reverse Voltage		V _{RRM}	V	1600
Maximum RMS Voltage		V _{RMS}	V	1120
Maximum DC blocking Voltage		V _{DC}	V	1600
Average rectified output current @60Hz sine wave, R-load	With heatsink T _c =115°C	I _O	A	8
	Without heatsink T _a =25°C			2.5
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, T _j =25°C		I _{FSM}	A	160
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, T _j =25°C				320
Current squared time @1ms≤t≤8.3ms T _j =25°C, Rating of per diode		I ² t	A ² S	127
7Storage 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	GBU816
Maximum instantaneous forward voltage drop per diode	V_F	V	$I_{FM}=4.0\text{A}$	1.1
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	42

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

PARAMETER		SYMBOL	UNIT	GBU816
Thermal Resistance	Between junction and ambient, Without heatsink	$R_{\theta JA}$	$^{\circ}\text{C/W}$	25
	Between junction and case, With heatsink	$R_{\theta JC}$		2

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

■ **Ordering Information (Example)**

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GBU816	B1	Approximate 3.96	20	1000	2000	TUBE

■ **Characteristics (Typical)**

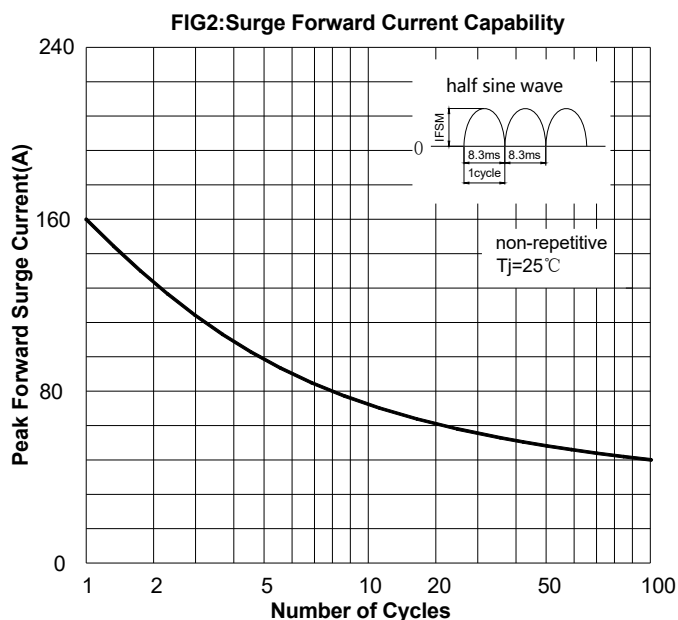
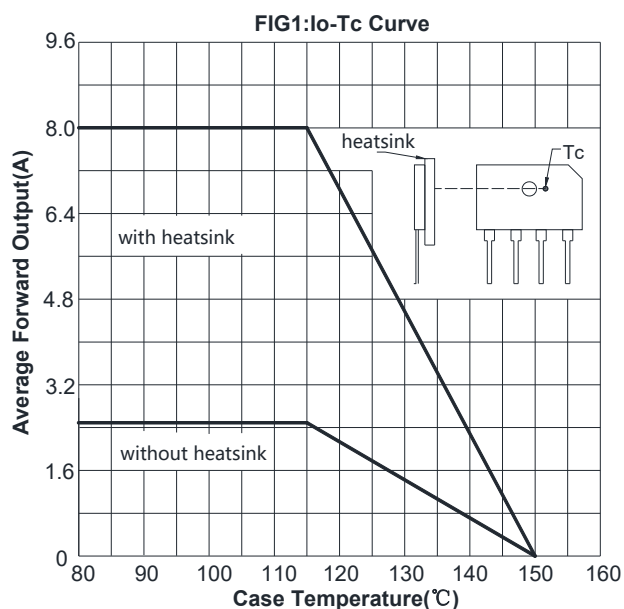


FIG3: Typical Forward Voltage

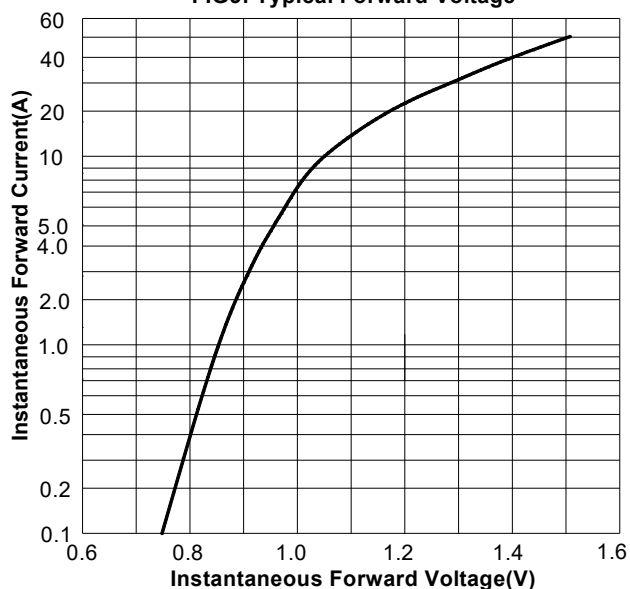
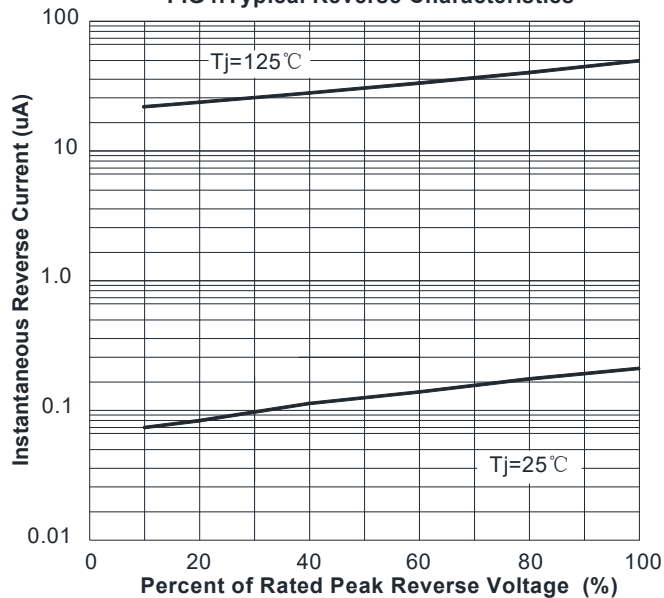
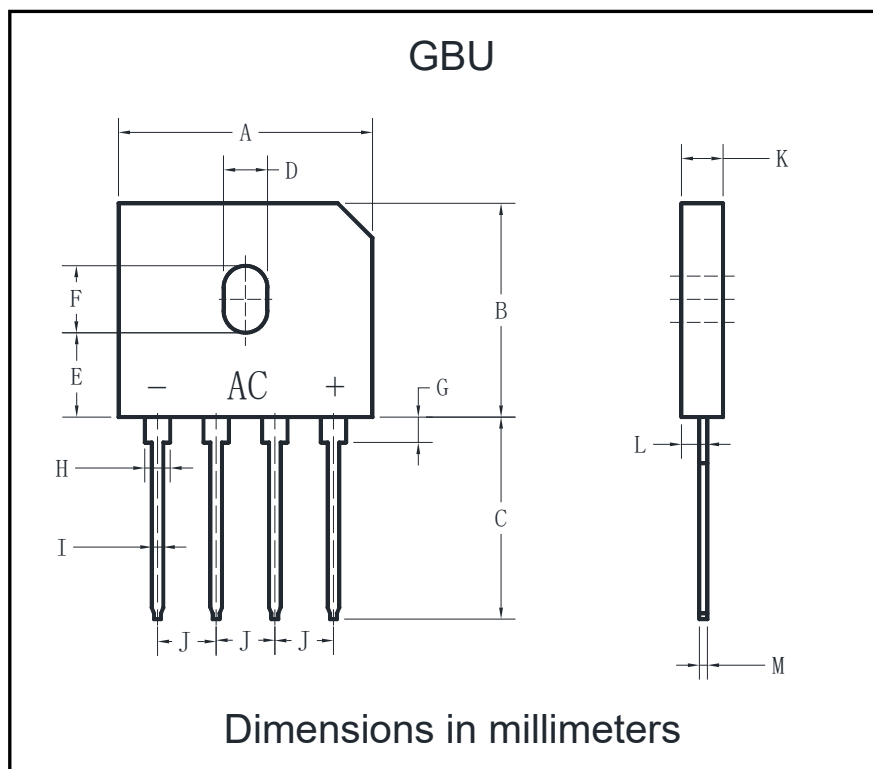


FIG4: Typical Reverse Characteristics



■ Outline Dimensions



GBU		
Dim	Min	Max
A	21.80	22.30
B	18.30	18.80
C	17.50	18.00
D	3.30	3.90
E	7.10	7.50
F	5.50	5.90
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