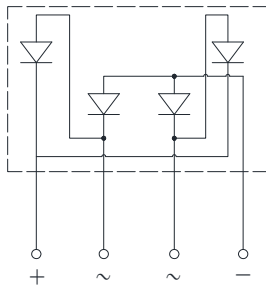
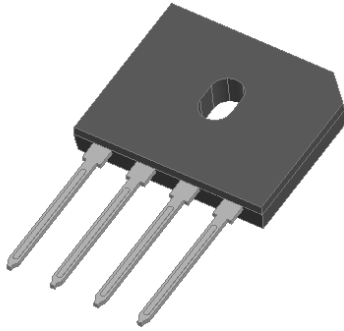


## Low VF Bridge Rectifiers



### 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 switching power supply, home appliances, office equipment, industrial automation 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 (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	GBUL2506
Device marking code			GBUL2506
Maximum Repetitive Peak Reverse Voltage	VRRM	V	600
Maximum RMS Voltage	VRMS	V	420
Maximum DC blocking Voltage	VDC	V	600
Average rectified output current @60Hz sine wave, R-load	IO	A	With heatsink Tc =125°C
			Without heatsink Ta =25°C
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, Tj=25°C	IFSM	A	450
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C			900
Current squared time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode	I²t	A²S	840
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	8.0



# GBUL2506

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	Min	Typ	Max
Instantaneous forward voltage drop per diode	V <sub>F</sub>	V	I <sub>FM</sub> =12.5A	0.80	0.90	0.92
DC reverse current at rated DC blocking voltage per diode	I <sub>R</sub>	μA	T <sub>j</sub> =25°C	-	0.15	5
			T <sub>j</sub> =125°C	-	60	100
Junction capacitance	C <sub>j</sub>	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	90	180	360

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

PARAMETER		SYMBOL	UNIT	GBUL2506
Thermal Resistance	Between junction and ambient, Without heatsink	R <sub>θJ-A</sub>	°C/W	25.0
	Between junction and Lead, With heatsink	R <sub>θJ-L</sub>		3.0
	Between junction and Case With heatsink	R <sub>θJ-C</sub>		0.5

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

## ■Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GBUL2506	B1	Approximate 3.96	20	1000	2000	TUBE

## ■ Characteristics(Typical)

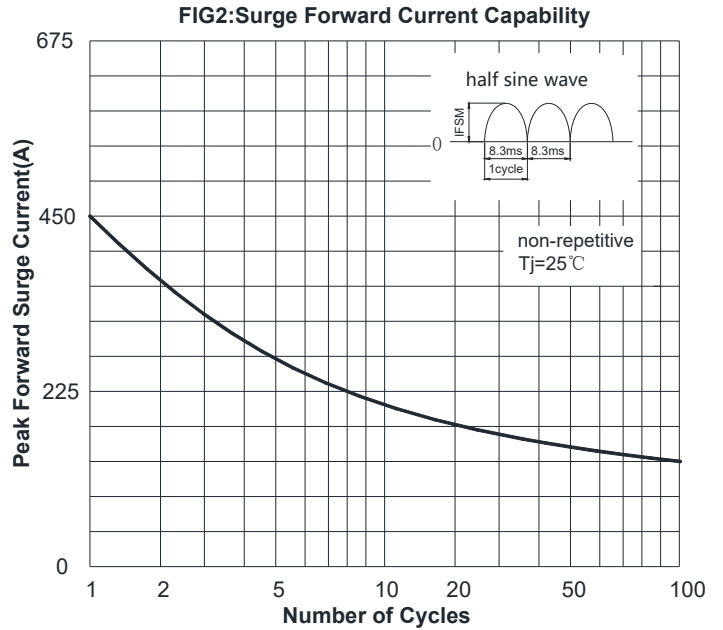
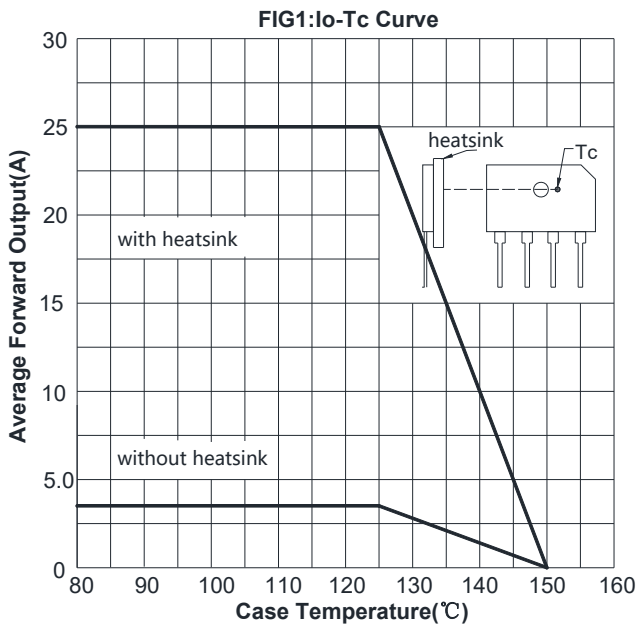


FIG3: Typical Forward Voltage

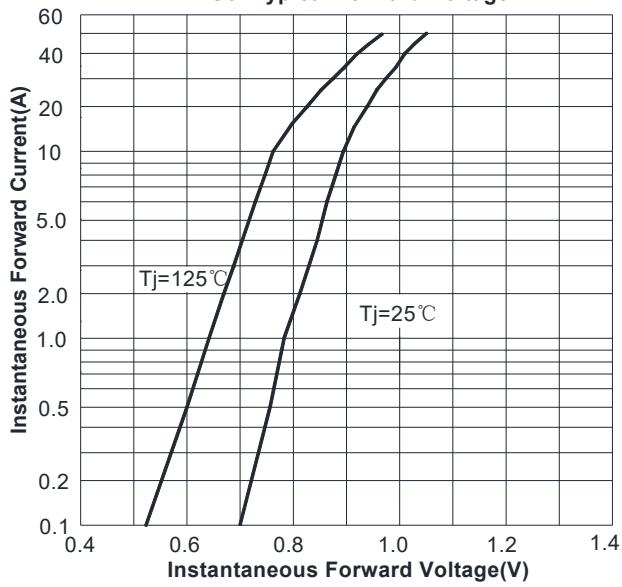
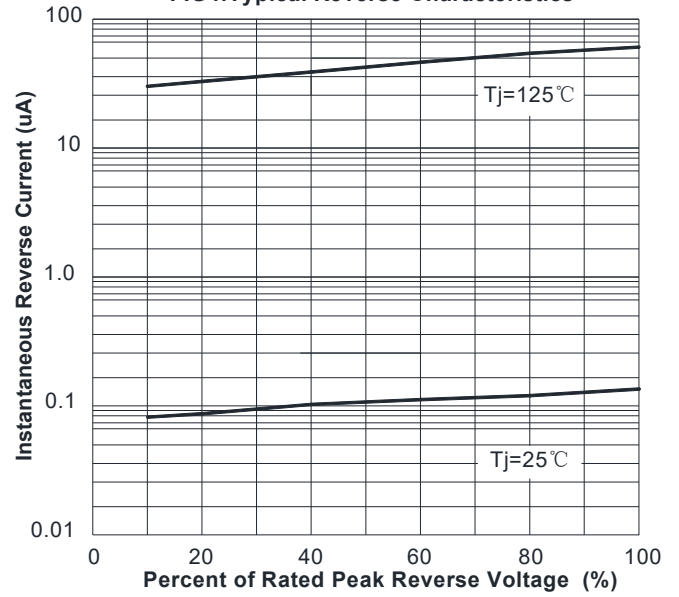
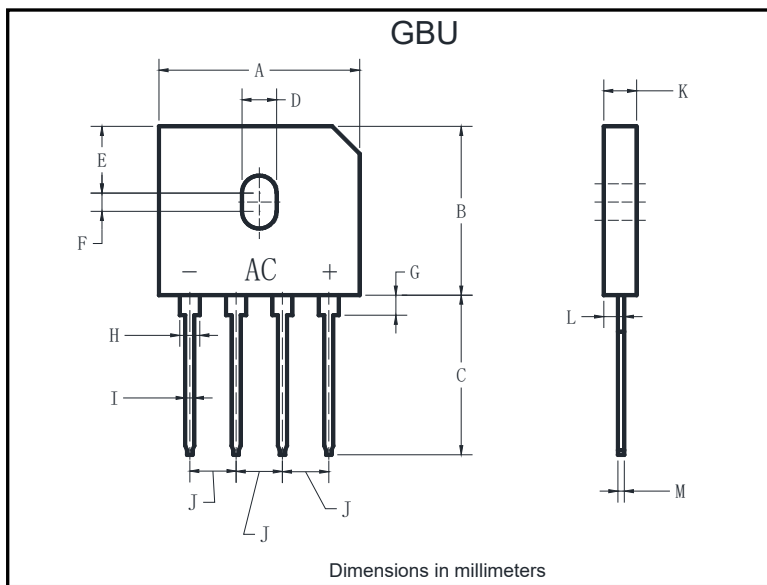


FIG4: Typical Reverse Characteristics



## ■ Outline Dimensions



GBU		
Dim	Min	Max
A	21.80	22.30
B	18.30	18.80
C	17.50	18.00
D	3.50	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



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