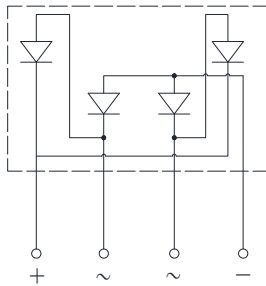
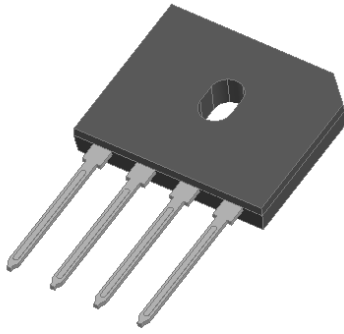


Low VF Bridge Rectifiers



Features

- UL recognition, file #E230084
- based on silicon planar process
- 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 (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	GBUU2506	
Device marking code			GBUU2506	
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	V	600	
Maximum RMS Voltage	V _{RMS}	V	420	
Maximum DC blocking Voltage	V _{DC}	V	600	
Average rectified output current @60Hz sine wave, R-load	With heatsink T _c =110°C	I _O	A	25.0
	Without heatsink T _a =25°C			4.0
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, T _j =25°C	I _{FSM}	A	360	
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, T _j =25°C			720	
Current squared time @1ms≤t≤8.3ms T _j =25°C, Rating of per diode	I ² t	A ² S	538	
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	T _{or}	kg·cm	8.0	



GBUU2506

■Electrical Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	Min	Typ	Max
Instantaneous forward voltage drop per diode	V _F	V	I _{FM} =12.5A	0.80	0.875	0.92
DC reverse current at rated DC blocking voltage per diode	I _R	μA	T _j =25°C	-	0.01	5
			T _j =125°C	-	3.5	50
Junction capacitance	C _j	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	150	185	250

■Thermal Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	GBUU2506
Thermal Resistance	Between junction and ambient, Without heatsink	R _{θJ-A}	°C/W	25.0
	Between junction and case, With heatsink	R _{θJ-C}		0.6
	Between junction and Lead With heatsink	R _{θJ-L}		4.0

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
GBUU2506	B1	Approximate 3.96	20	1000	2000	TUBE

■ Characteristics(Typical)

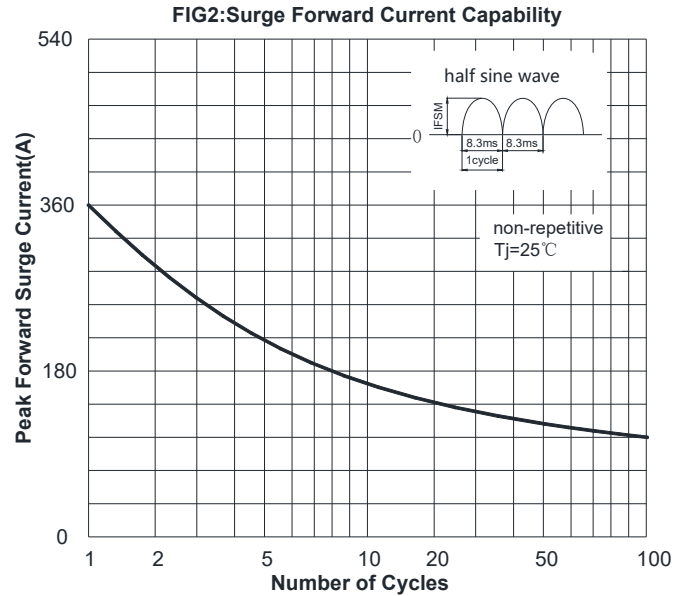
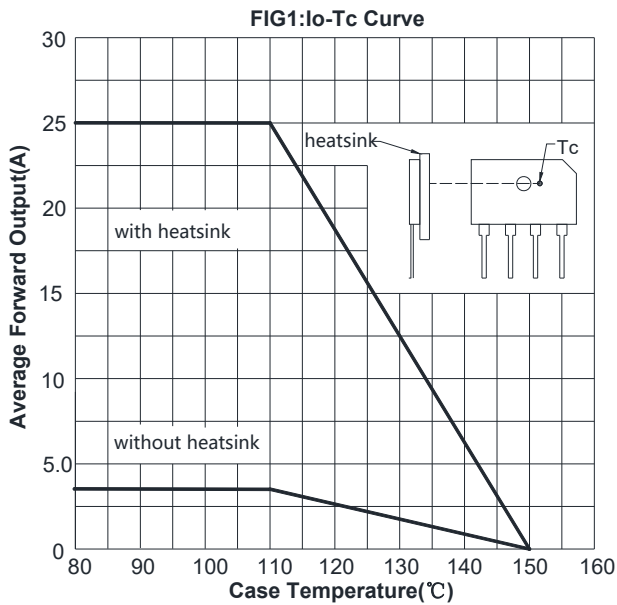


FIG3: Typical Forward Voltage

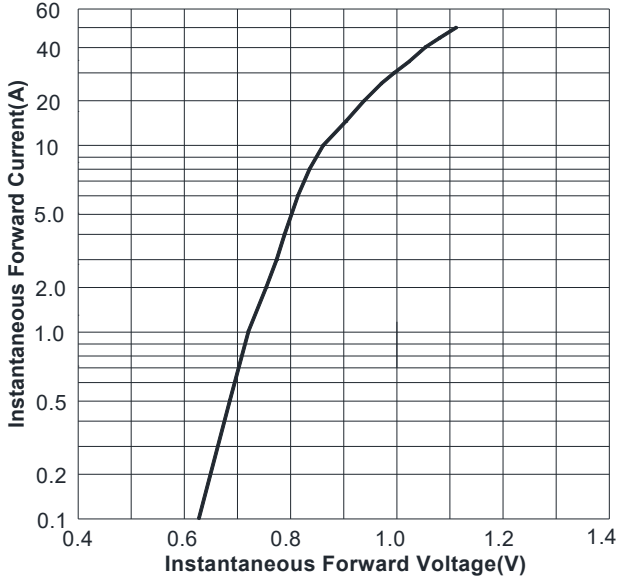
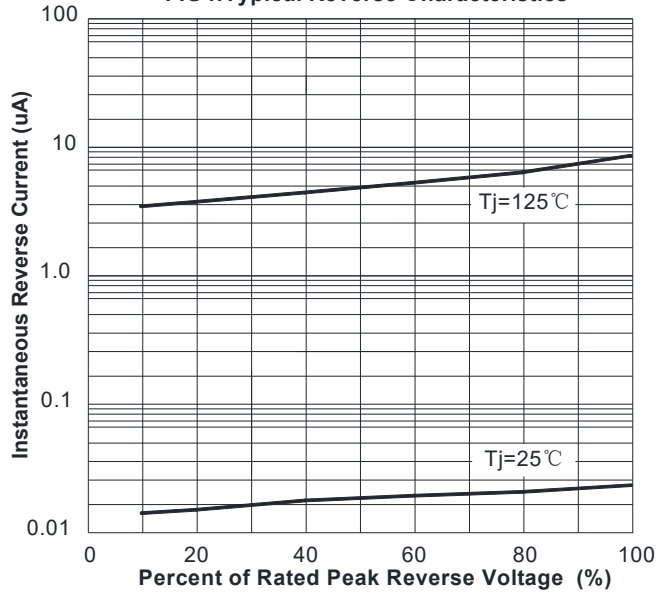
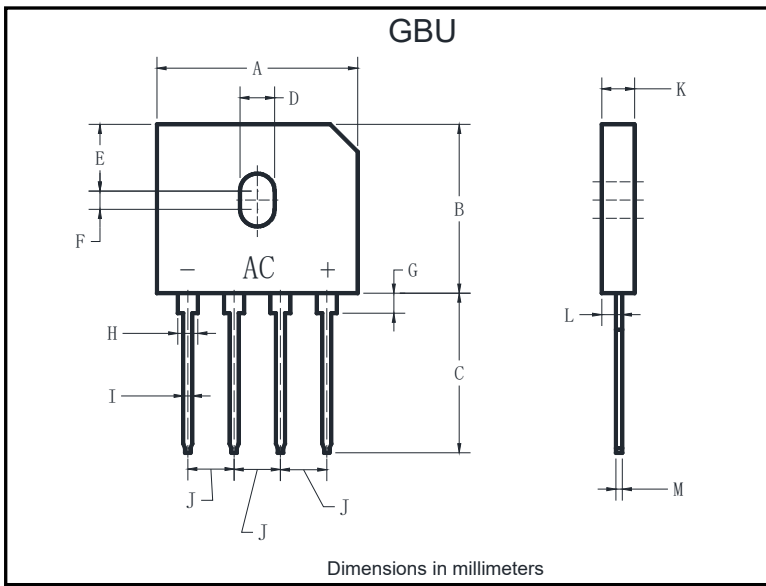


FIG4: Typical Reverse Characteristics



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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