

Bridge Rectifier

Features

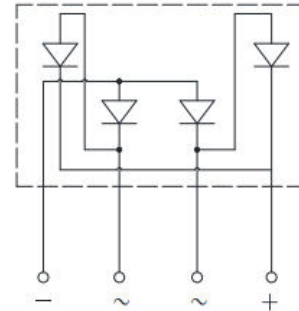
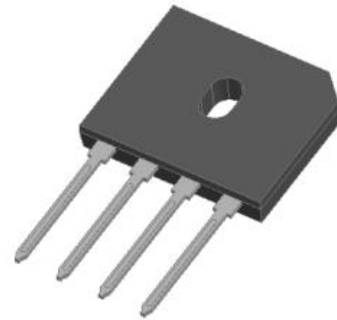
- UL recognition, file #E230084
- Ideal for printed circuit boards
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

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	GBU10005A	GBU1001A	GBU1002A	GBU1004A	GBU1006A	GBU1008A	GBU1010A
Device marking code			GBU10005A	GBU1001A	GBU1002A	GBU1004A	GBU1006A	GBU1008A	GBU1010A
Repetitive peak reverse voltage	VRRM	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz half sine wave, R-load	IO	With heatsink T _c =80°C	10.0						
		Without heatsink T _a =25°C	3.6						
Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, T _j =25°C	IFSM	A	200						
Current squared time @1ms≤t≤8.3ms T _j =25°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						
Mounting torque @recommend torque: 5kg • cm	Tor	kg • cm	8						

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	GBU10005A	GBU1001A	GBU1002A	GBU1004A	GBU1006A	GBU1008A	GBU1010A
Maximum instantaneous forward voltage drop per diode	V _F	V	IFM=5.0A	1.00						
Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM}	μA	V _{RM} =V _{RRM}	5						

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

PARAMETER		SYMBOL	UNIT	GBU10005A	GBU1001A	GBU1002A	GBU1004A	GBU1006A	GBU1008A	GBU1010A
Thermal Resistance	Between junction and ambient, Without heatsink	R θ J-A	°C/W	25.0						
	Between junction and case, With heatsink	R θ J-C		2.3						

■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GBU10005A THRU GBU1010A	B1	Approximate 3.96	20	1000	2000	TUBE

■ Characteristics (Typical)

FIG1: I_o-T_c Curve

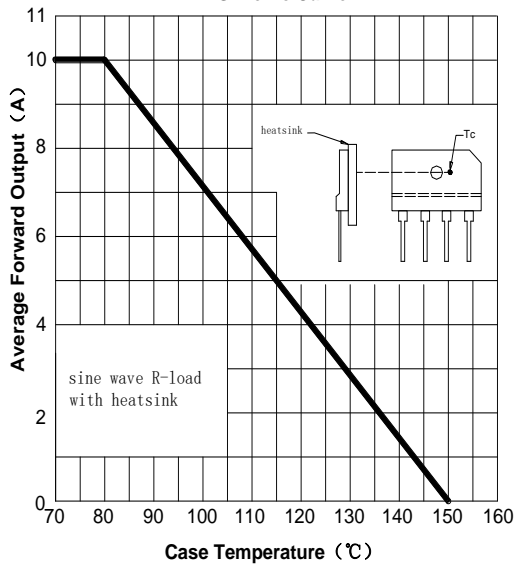


FIG2: Surge Forward Current Capability

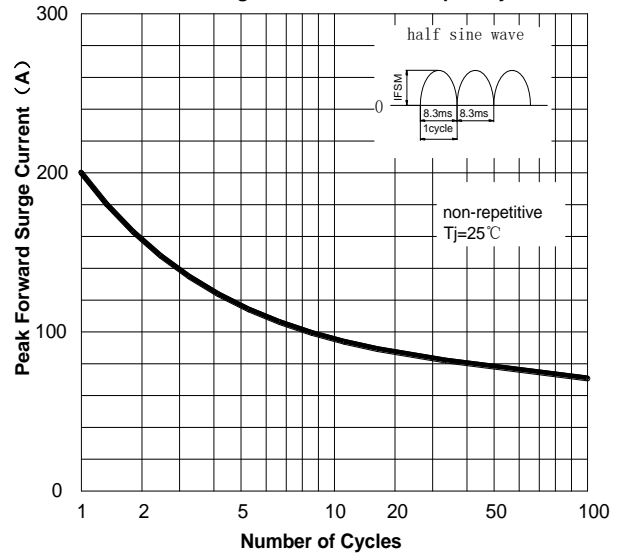


FIG3: Forward Voltage

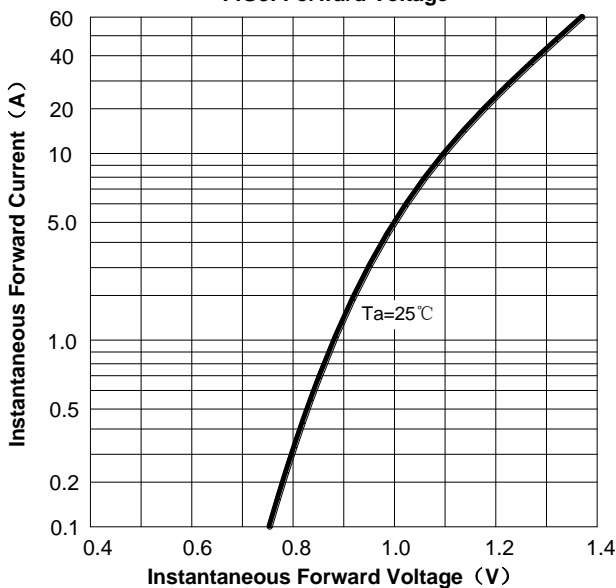
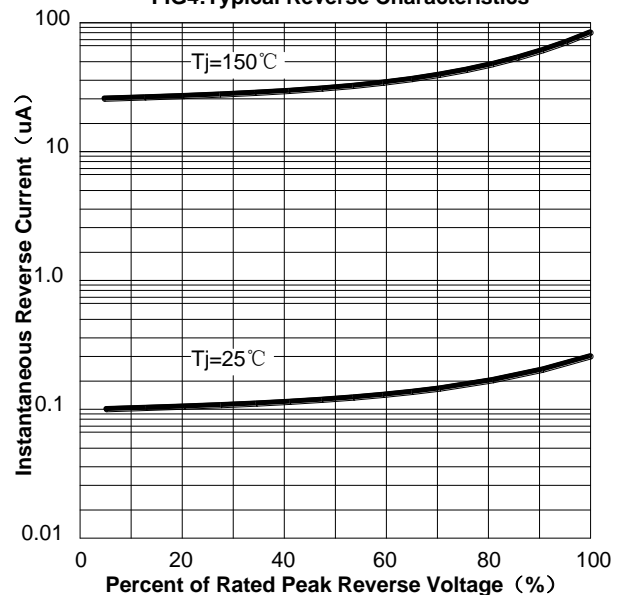
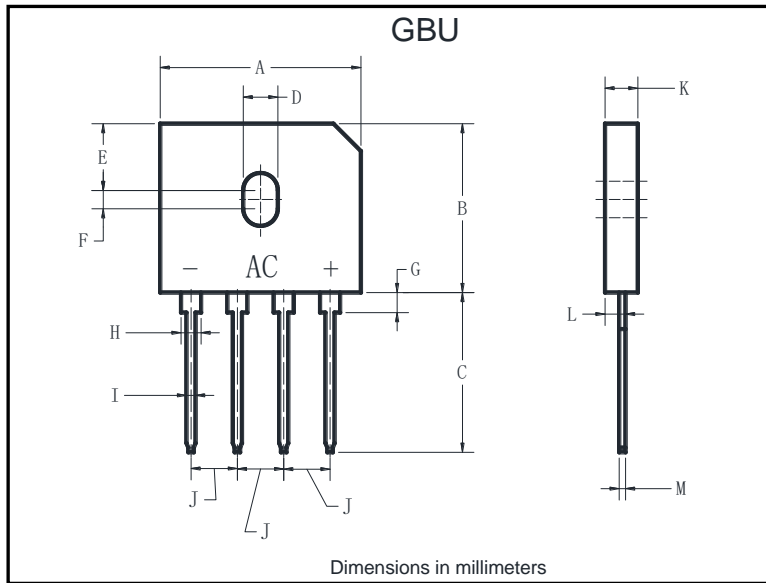


FIG4: Typical Reverse Characteristics



■ 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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