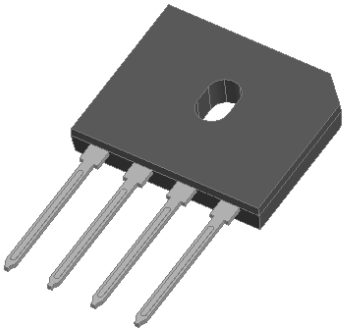
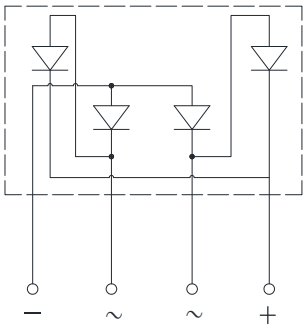
Bridge Rectifier





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℃ Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	GBU6005	GBU601	GBU602	GBU604	GBU606	GBU608	GBU610
Device marking code				GBU6005	GBU601	GBU602	GBU604	GBU606	GBU608	GBU610
Repetitive peak reverse voltage		V_{RRM}	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load	With heatsink T_C =110℃	I_O	A	6						
	Without heatsink T_a =25℃			2.8						
Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, Tj=25℃		I_{FSM}	A	135						
Current squared time @1ms≤t≤8.3ms Tj=25℃, Rating of per diode		I^2t	A^2S	75						
Storage temperature		Tstg	℃	-55 ~+150						
Junction temperature		T_j	℃	-55 ~+150						
Dielectric strength @terminals to case, AC 1 minute		Vdis	KV	2						
Mounting torque @recommend torque：5kg • cm		Tor	kg • cm	8						

■Electrical Characteristics (T_a=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	GBU6005	GBU601	GBU602	GBU604	GBU606	GBU608	GBU610
Maximum instantaneous forward voltage drop per diode	V_F	V	I_{FM}=3A	1.05						
Maximum DC reverse current at rated DC blocking voltage per diode	I_{RRM}	μA	V_{RM}=V_{RRM}	10						

■Thermal Characteristics （T_a=25℃ Unless otherwise specified）

PARAMETER		SYMBOL	UNIT	GBU6005	GBU601	GBU602	GBU604	GBU606	GBU608	GBU610
Thermal Resistance	Between junction and ambient, Without heatsink	RθJ-A	℃/W	26						
	Between junction and case, With heatsink	RθJ-C		3.4						

■Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GBU6005 THRU GBU610	B1	Approximate 3.96	20	1000	2000	TUBE
GBU6005 THRU GBU610	A1	Approximate 3.96	250	250	4000	BOX

■ Characteristics (Typical)

FIG1:Io-Tc Curve

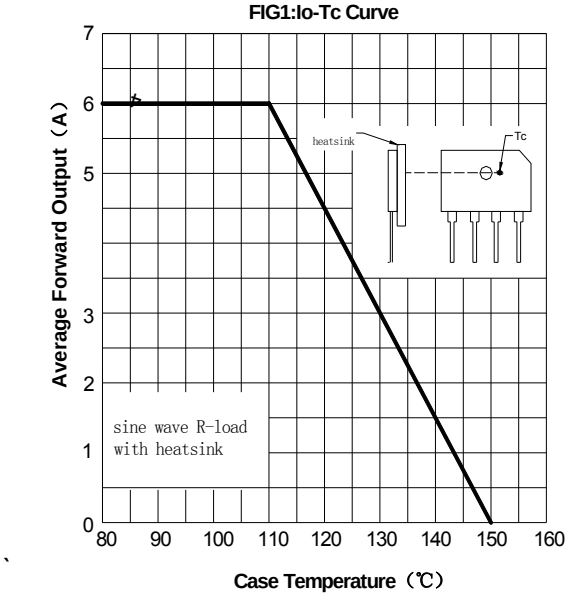


FIG2:Surge Forward Current Capability

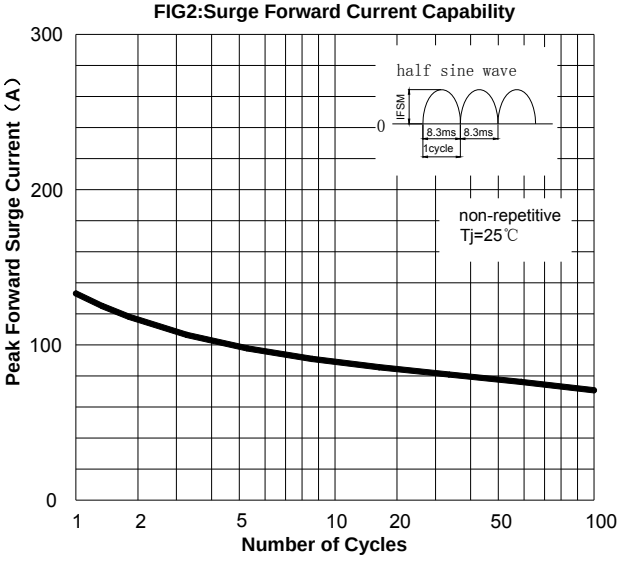


FIG3: Forward Voltage

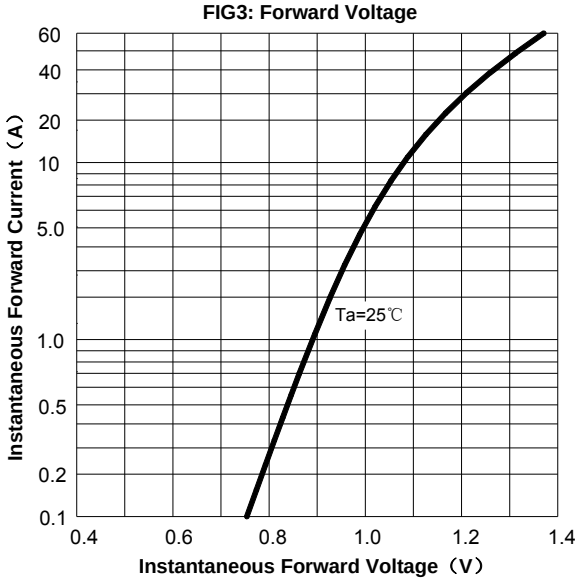
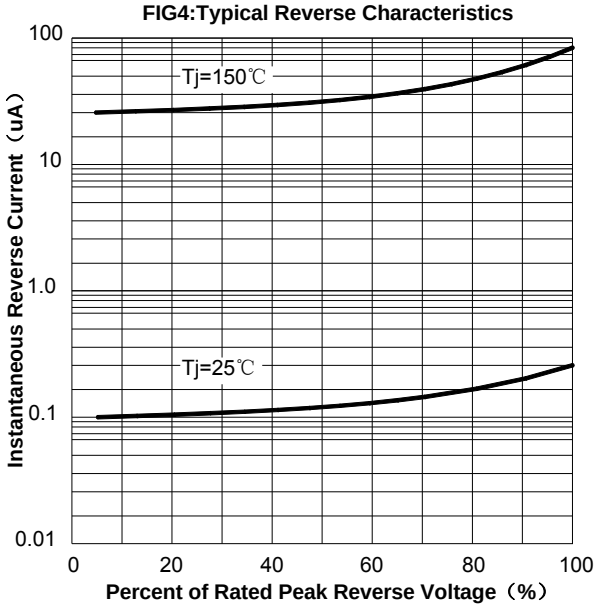
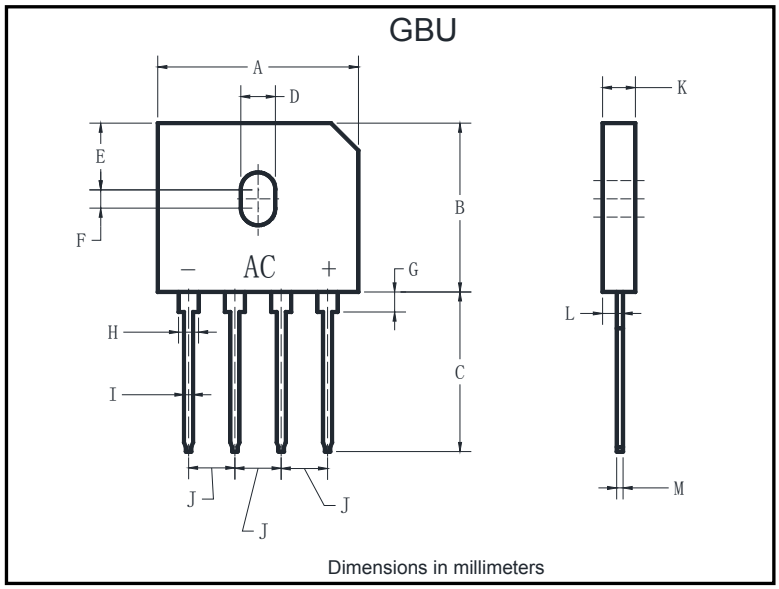


FIG4:Typical Reverse Characteristics



■ 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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