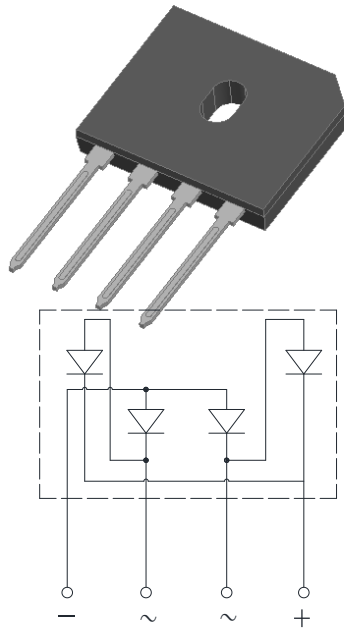


Bridge Rectifier



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 (Ta=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	GBU10005	GBU1001	GBU1002	GBU1004	GBU1006	GBU1008	GBU1010
Device marking code				GBU10005	GBU1001	GBU1002	GBU1004	GBU1006	GBU1008	GBU1010
Repetitive peak reverse voltage		VRRM	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz half sine wave, R-load	With heatsink Tc =80℃	IO	A	10.0						
	Without heatsink Ta =25℃			3.2						
Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, Tj=25℃		IFSM	A	175						
Current squared time @1ms≤t≤8.3ms Tj=25℃, Rating of per diode		I²t	A²S	127						
Storage temperature		Tstg	℃	-55 ~+150						
Junction temperature		Tj	℃	-55 ~+150						
Dielectric strength @ terminals to case, AC 1 minute		Vdis	KV	2.5						
Mounting torque @recommend torque: 5kg·cm		Tor	kg·cm	8						

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	GBU10005	GBU1001	GBU1002	GBU1004	GBU1006	GBU1008	GBU1010
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=5.0A	1.00						
Maximum DC reverse current at rated DC blocking voltage per diode	IRRM	μA	VRM=VRRM	5						



GBU10005 THRU GBU1010

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

PARAMETER		SYMBOL	UNIT	GBU10005	GBU1001	GBU1002	GBU1004	GBU1006	GBU1008	GBU1010
Thermal Resistance	Between junction and ambient, Without heatsink	$R_{\theta J-A}$	$^{\circ}\text{C/W}$	25.0						
	Between junction and case, With heatsink	$R_{\theta J-C}$		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
GBU10005 THRU GBU1010	B1	Approximate 3.96	20	1000	2000	TUBE

■ Characteristics (Typical)

FIG1: I_o - T_c Curve

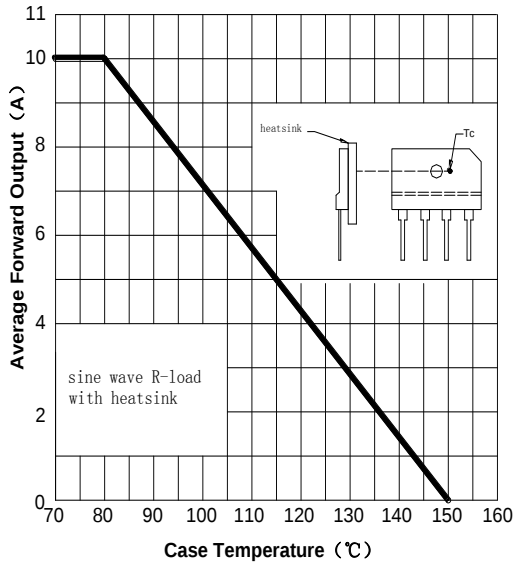


FIG2: Surge Forward Current Capability

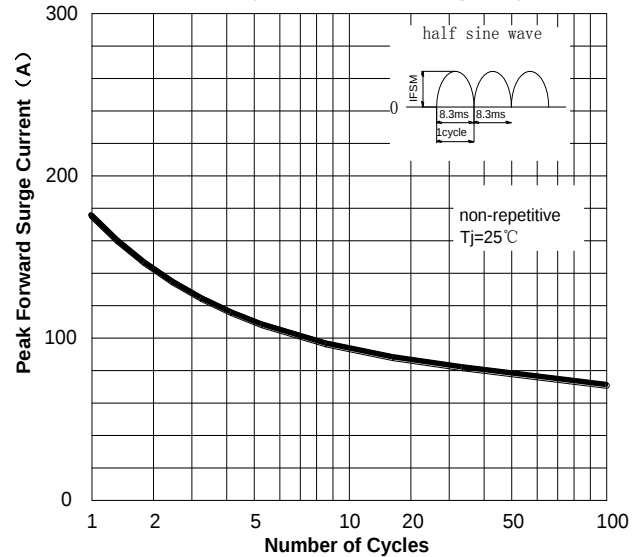


FIG3: Forward Voltage

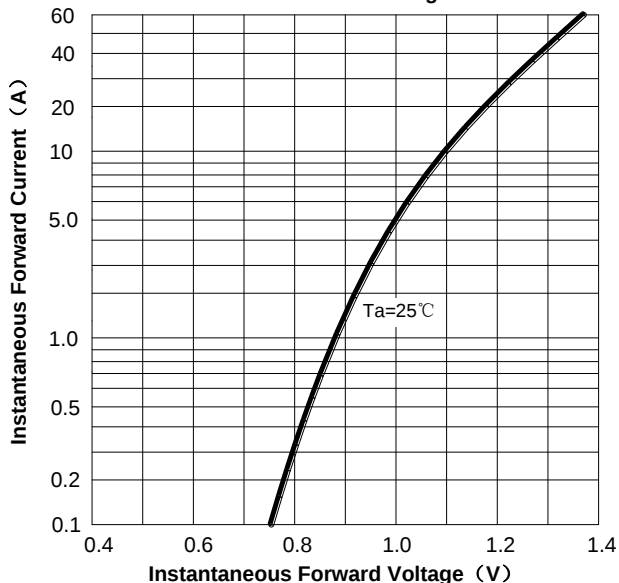
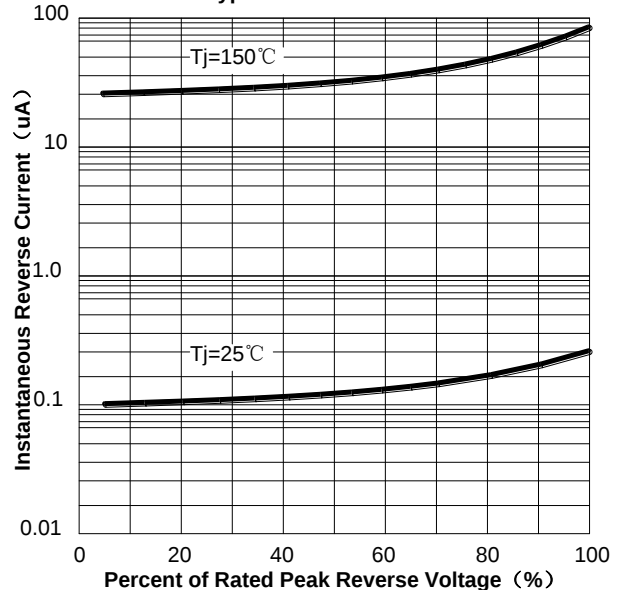


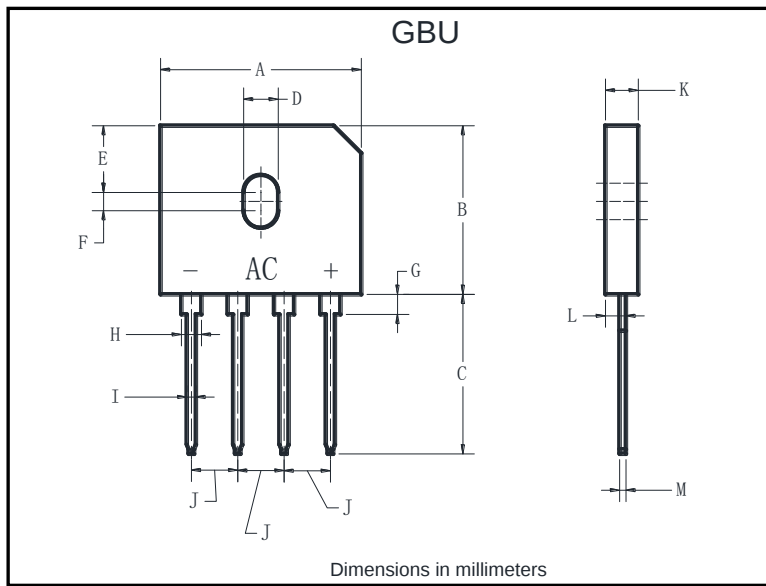
FIG4: Typical Reverse Characteristics





GBU10005 THRU GBU1010

■ 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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