BORN SEMICONDUCTOR

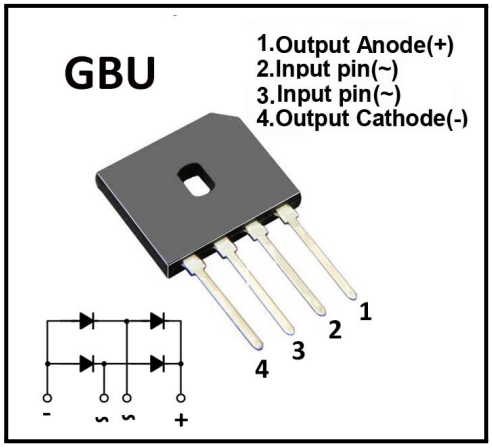
GBU8005-GBU810/G

Single Phase 8.0Amp Glass passivated Bridge Rectifiers

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Idea for printed circuit board
- Glass passivated Junction chip
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed 250°C/10 seconds at terminals
- The G suffix is uses for photoresist chip, otherwise it is a knife scraping chip

Mechanical Data



MECHANICAL DATA

- Case: Molded plastic body
- Terminals: Solder plated, solderable per MIL-STD-750,Method 2026
- Polarity: Polarity symbol marking on body
- Mounting Position: Any

Maximum Ratings And Electrical Characteristics (@T_A=25°C unless otherwise noted)

Symbol	Parameter	GBU 8005	GBU 801	GBU 802	GBU 804	GBU 806	GBU 808	GBU 810	Unit
V_{RRM}	repetitive peak reverse voltage	50	100	200	400	600	800	1000	V
V_{RMS}	RMS voltage	35	70	140	280	420	560	700	V
V_{DC}	DC blocking voltage	50	100	200	400	600	800	1000	V
I_{AV}	Maximum average forward rectified current with heatsink	8.0							A
I_{FSM}	Peak forward surge current, 8.3ms single half sine-wave	175.0							A
I_t^2	I_t^2 Rating for fusing (t=8.3ms,T_A=25°C)	127.1							A_S^2
V_F	Forward Voltage at 8.0A	1.10							V
I_R	Peak Reverse Current@T_A=25°C at rated DC blocking voltage@ T_A=125°C	5.0 500							uA
C_J	Typical junction capacitance (Note 1)	75							pF
R_{qJA}	Typical thermal resistance	31.0							°C/W
T_J	Operation Temperature Range	-55 to +150							°C
T_{STG}	Storage Temperature Range	-55 to +150							

Note:(1)Measured at 1MHz and applied reverse voltage of 4.0V D.C.
(2)Mounted on glass epoxy PC board with 1.3mm² solder pad.
(3) Device mounted on 50mm x 50mm x 1.6mm Cu Plate Heatsink.

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Revision: 2022-Jan-1

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Ratings And Characteristic Curves

Figure 1: DERATING CURVE OUTPUT RECTIFIED CURRENT

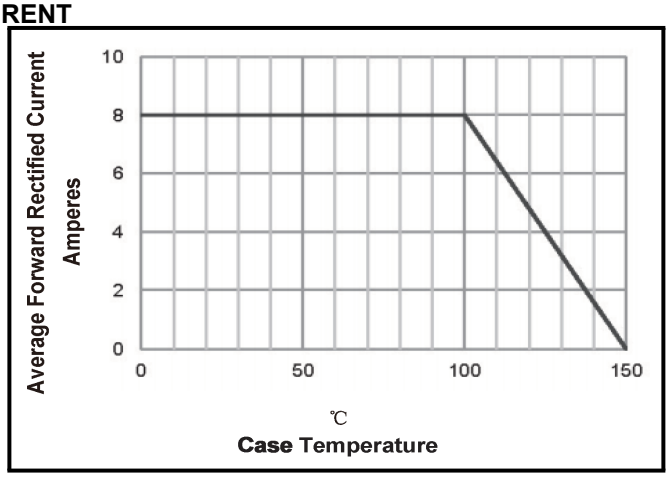


Figure 2: MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

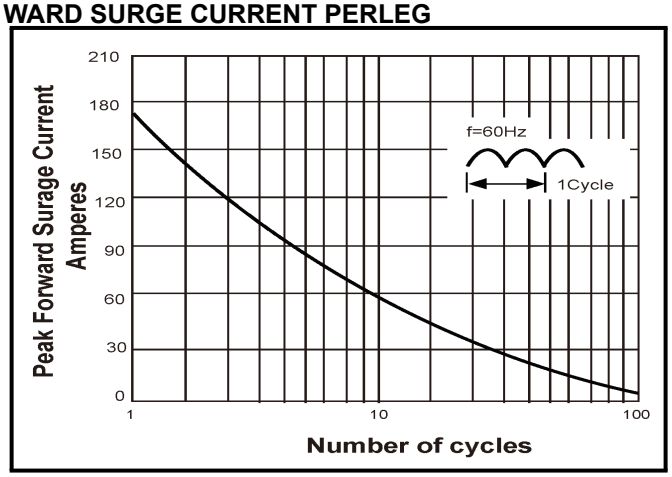


Figure 3:TYPICAL FORWARD VOLTAGE CHARACTERISTICS

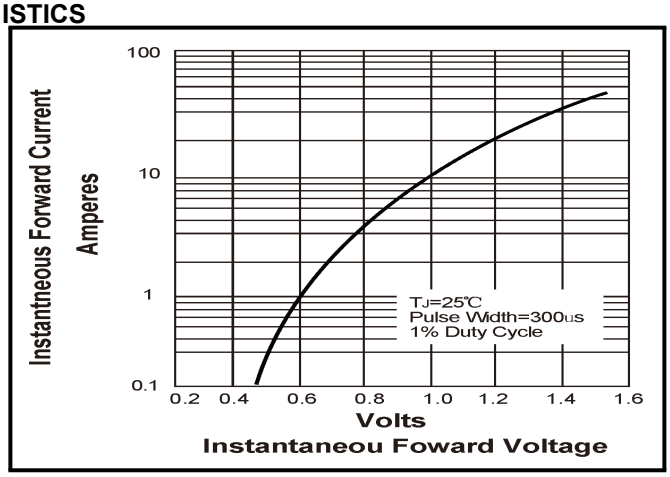
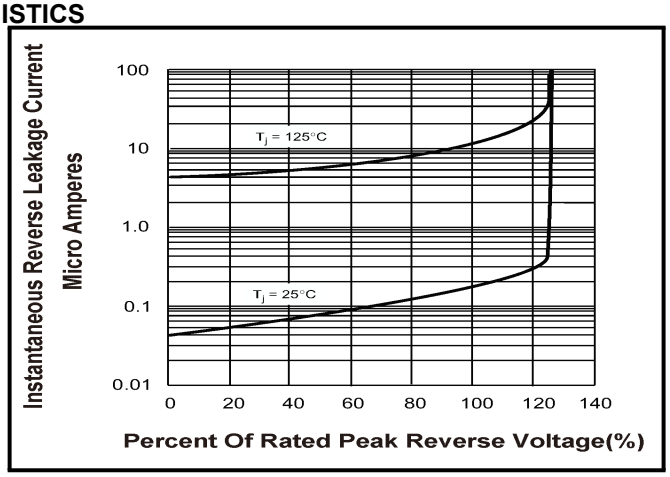


Figure 4:TYPICAL REVERSE LEAKAGE CHARACTERISTICS



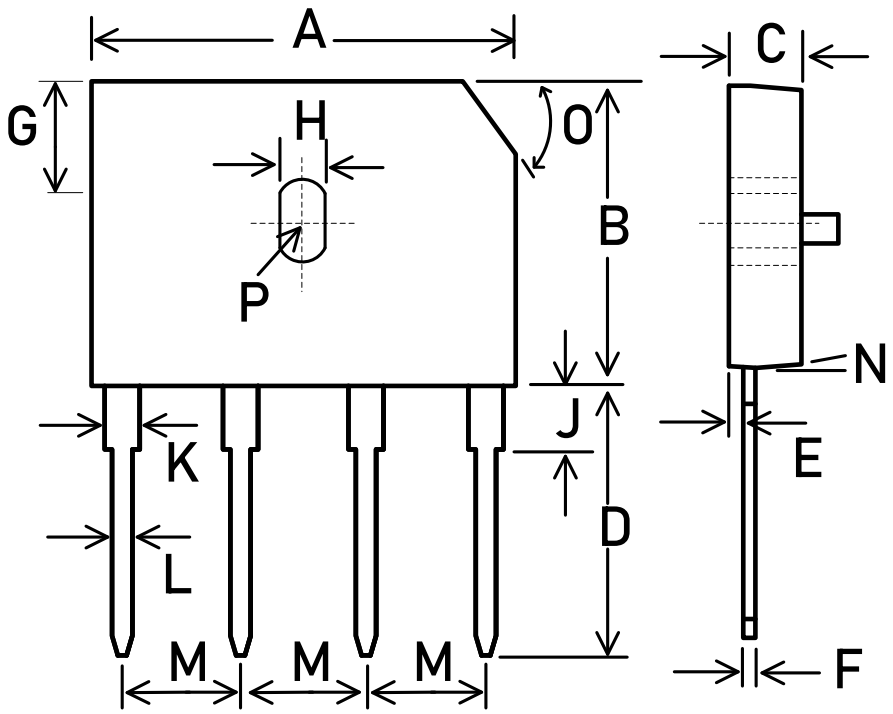
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Outline Drawing –GBU



SYMBOL	MILLIMETER	
	MIN.	MAX.
A	21.80	22.30
B	18.30	18.80
C	3.30	3.60
D	17.50	18.00
E	0.76	1.00
F	0.45	0.55
G	7.40	7.90
H	3.50	4.10
I	1.65	2.16
J	2.25	2.75
K	2.00	2.40
L	1.00	1.30
M	4.83	5.33
N	7.0° TYP.	
O	(3.2)x45°	
P	1.90PADIUS	

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