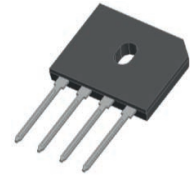


GSGBU801 thru GSGBU810

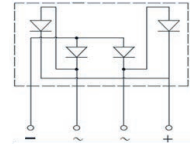
General Purpose Bridge Rectifiers
 Reverse Voltage 100V to 1000V Forward Current 8.0A

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junction
- High current capability
- Low forward voltage drop
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2015/863/EU



GBU



Schematic Diagram

Mechanical Data

- Case: GBU molded plastic body
- Terminals: Plated leads solderable per MIL-STD-750, method 2026
- Mounting position: Any

Applications

Used in AC/DC bridge full wave rectification for SMPS, lighting ballaster, adapter, charger, home appliances, office equipment and telecommunication applications.

Maximum Ratings and Electrical Characteristics

(Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, resistive or inductive load. For capacitive load, derate current by 20%.)

Parameters	Symbol	GS GBU801	GS GBU802	GS GBU804	GS GBU806	GS GBU808	GS GBU810	Units	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V	
Maximum RMS Voltage	V_{RMS}	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current, (See Fig 2)	$I_{F(AV)}$	8.0						A	
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	180						A	
Rating for Fusing (t=8.3ms)	I^2t	134						A ² S	
Maximum Instantaneous Forward Voltage at 4.0A DC	V_F	1.00						V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_A=25^\circ\text{C}$						5	μA
		$T_A=125^\circ\text{C}$						100	μA
Typical Junction Capacitance ¹	C_J	60						pF	
Typical Thermal Resistance, Junction-Ambient ²	$R_{\theta JA}$	25						°C/W	
Typical Thermal Resistance, Junction-Case ²	$R_{\theta JC}$	2.2						°C/W	
Operating Temperature Range	T_J	-55 to +150						°C	
Storage Temperature Range	T_{STG}	-55 to +150						°C	

Notes:

1. Measured at 1MHz and applied reverse voltage of 4.0 Volts.
2. Unit mounted on 50mm x 50mm x 1.6mm copper plate heatsink.

Ratings and Characteristics Curves

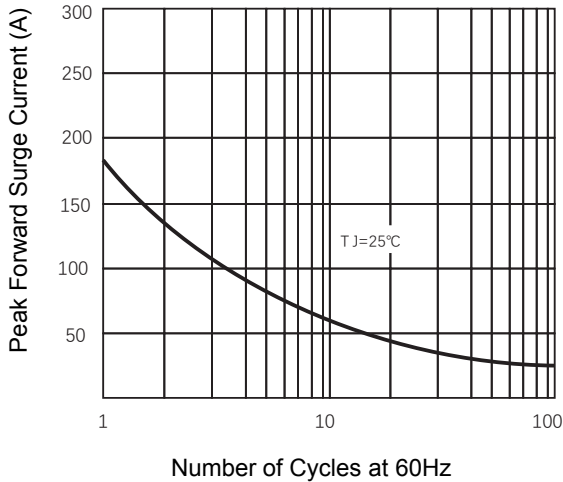


Figure 1. Maximum Forward Surge Current

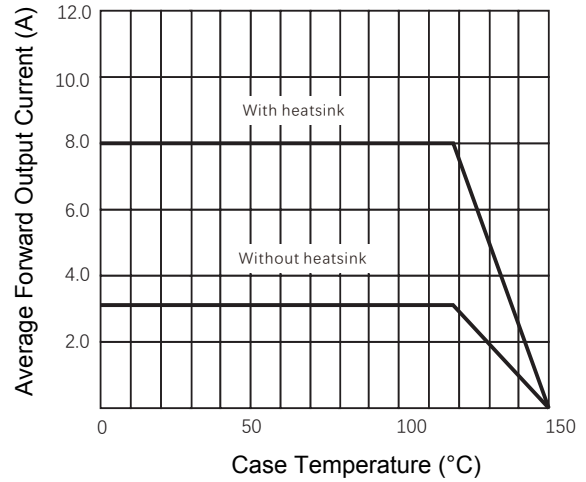


Figure 2. Forward Current Derating Curve

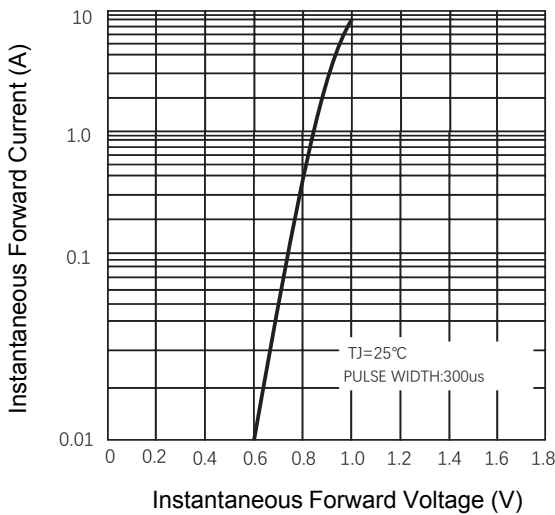


Figure 3. Typical Forward Characteristics

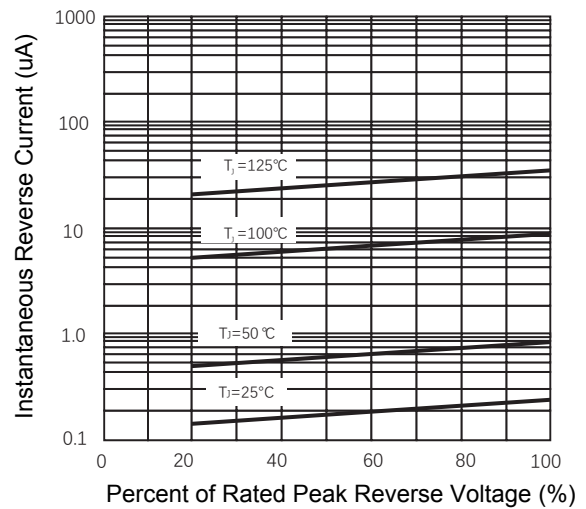
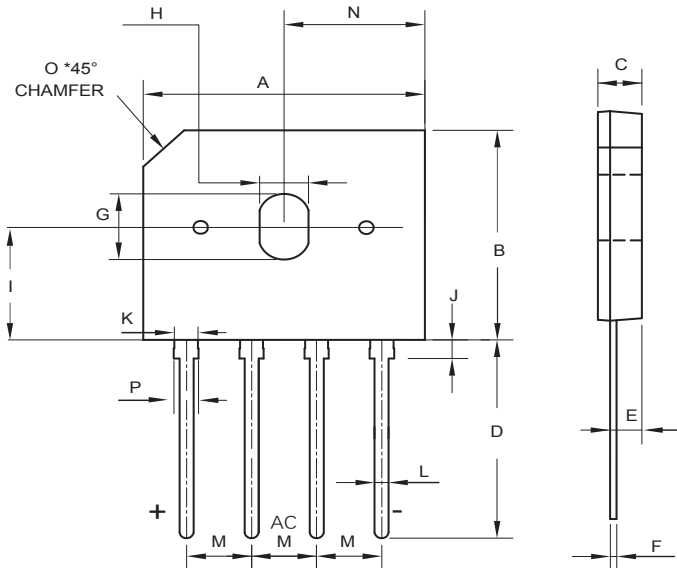


Figure 4. Typical Reverse Characteristics

Package Outline Dimensions (GBU)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	21.80	22.20	0.858	0.874
B	18.30	18.70	0.720	0.736
C	3.35	3.55	0.132	0.140
D	17.50	18.50	0.689	0.728
E	2.30	2.70	0.091	0.106
F	0.48	0.58	0.019	0.023
G	5.10	6.00	0.201	0.236
H	3.30	4.00	0.130	0.157
I	9.50	10.50	0.374	0.413
J	1.90	2.60	0.075	0.102
K	2.05	2.25	0.081	0.089
L	1.10	1.30	0.043	0.051
M	4.83	5.33	0.190	0.210
N	10.90	11.10	0.429	0.437
O	3.20 TYP		0.126 TYP	
P	2.15	2.35	0.085	0.093

Order Information

Device	Package	Marking	Packaging	SPQ
GSGBU801	GBU	GBU801	Tube	20 Pcs / Tube
GSGBU802	GBU	GBU802	Tube	20 Pcs / Tube
GSGBU804	GBU	GBU804	Tube	20 Pcs / Tube
GSGBU806	GBU	GBU806	Tube	20 Pcs / Tube
GSGBU808	GBU	GBU808	Tube	20 Pcs / Tube
GSGBU810	GBU	GBU810	Tube	20 Pcs / Tube

For more information, please contact us at: inquiry@goodarksemi.com