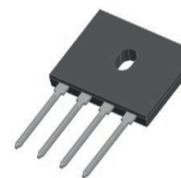


GSGBU4B thru GSGBU4M

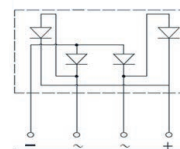
General Purpose Bridge Rectifiers
Reverse Voltage 100V to 1000V Forward Current 4.0A

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



Package: 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 GBU4B	GS GBU4D	GS GBU4G	GS GBU4J	GS GBU4K	GS GBU4M	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)		$I_{F(AV)}$	4.0						A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load		I_{FSM}	150						A
Rating for Fusing ($t=8.3ms$)		I^2t	93						A ² S
Forward Voltage	$I_F=2A$	V_F	1.00						V
	$I_F=4A$		1.05						V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ C$	I_R	5						μA
	$T_A=125^\circ C$		100						μA
Typical Junction Capacitance ¹		C_J	45						pF
Typical Thermal Resistance, Junction-Ambient ²		$R_{\theta JA}$	25						$^\circ C/W$
Typical Thermal Resistance, Junction-Case ²		$R_{\theta JC}$	2.2						$^\circ C/W$
Operating Temperature Range		T_J	-55 to +150						$^\circ C$
Storage Temperature Range		T_{STG}	-55 to +150						$^\circ C$

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

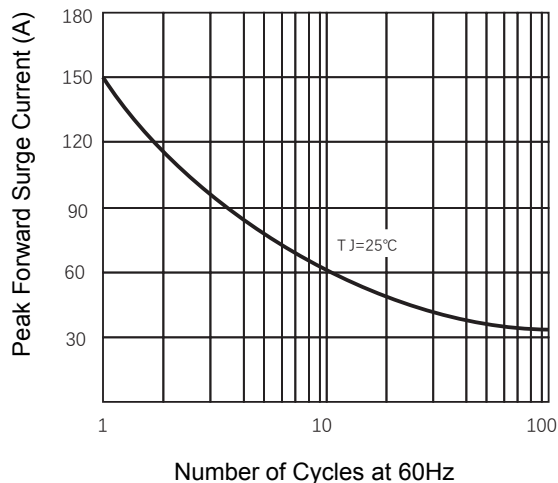


Figure 1. Maximum Forward Surge Current

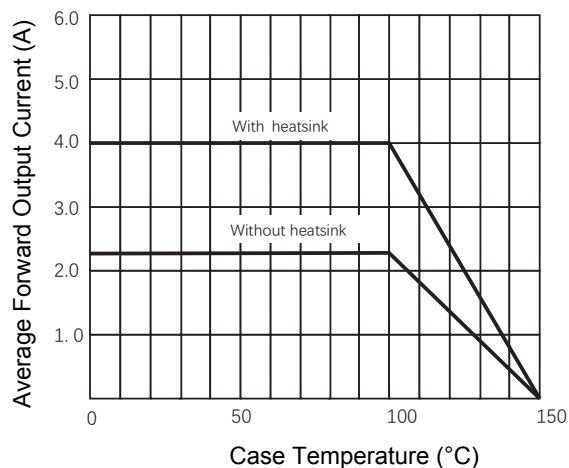


Figure 2. Forward Current Derating Curve

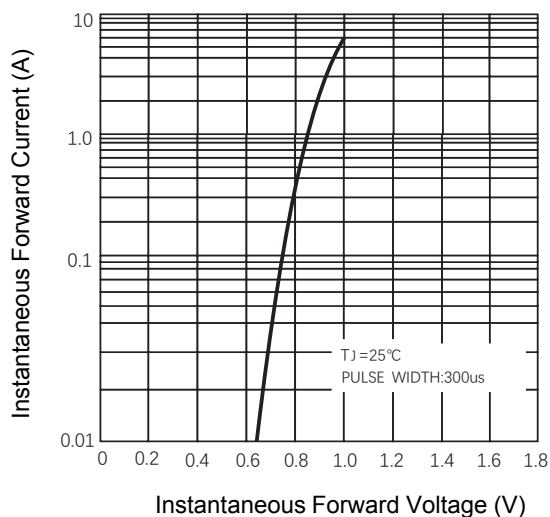


Figure 3. Typical Forward Characteristics

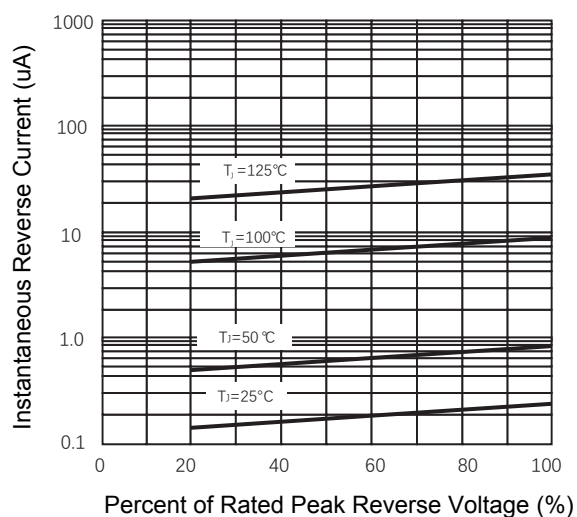
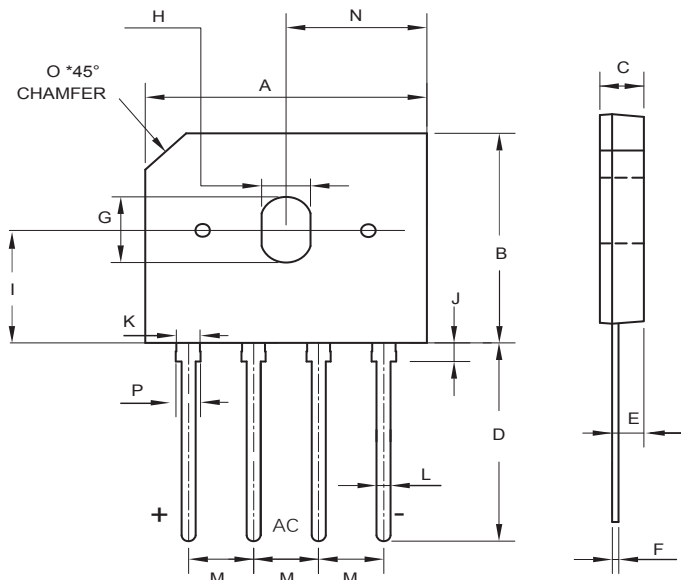


Figure 4. Typical Reverse Characteristics

Package Outline Dimensions (GBU)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	21.80	22.20	0.860	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	0.42	0.52	0.017	0.020
G	5.50	6.30	0.217	0.248
H	3.50	4.10	0.138	0.161
I	9.50	10.50	0.374	0.413
J	2.40	2.60	0.094	0.102
K	2.05	2.25	0.081	0.089
L	1.05	1.25	0.041	0.049
M	4.83	5.33	0.190	0.210
N	10.90	11.10	0.430	0.437
O	3.20 TYP		0.126 TYP	
P	2.15	2.35	0.085	0.093

Order Information

Device	Package	Marking	Carrier	Quantity
GSGBU4B	GBU	GBU401	Tube	20pcs / Tube
GSGBU4D	GBU	GBU402	Tube	20pcs / Tube
GSGBU4G	GBU	GBU404	Tube	20pcs / Tube
GSGBU4J	GBU	GBU406	Tube	20pcs / Tube
GSGBU4K	GBU	GBU408	Tube	20pcs / Tube
GSGBU4M	GBU	GBU410	Tube	20pcs / Tube

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