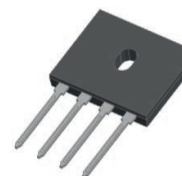


GSGBU2501 thru GSGBU2510

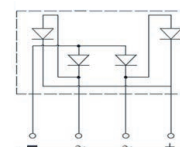
General Purpose Bridge Rectifiers
Reverse Voltage 100V to 1000V Forward Current 25.0A

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	GSGBU 2501	GSGBU 2502	GSGBU 2504	GSGBU 2506	GSGBU 2508	GSGBU 2510	Units
Maximum Reverse 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)}	25.0						A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load		I _{FSM}	300						A
Rating for Fusing (t=8.3ms)		I ² t	374						A ² S
Maximum Instantaneous Forward Voltage at 12.5A DC		V _F	1.00						V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _J =25°C	I _R	5						μA
	T _J =125°C		100						μA
Typical Junction Capacitance ¹		C _J	110						pF
Typical Thermal Resistance, Junction-Ambient ²		R _{θJA}	25						°C/W
Typical Thermal Resistance, Junction-Case ²		R _{θJC}	1.0						°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 75 mm x 45 mm x 5.5 mm copper plate heatsink.

Ratings and Characteristics Curves

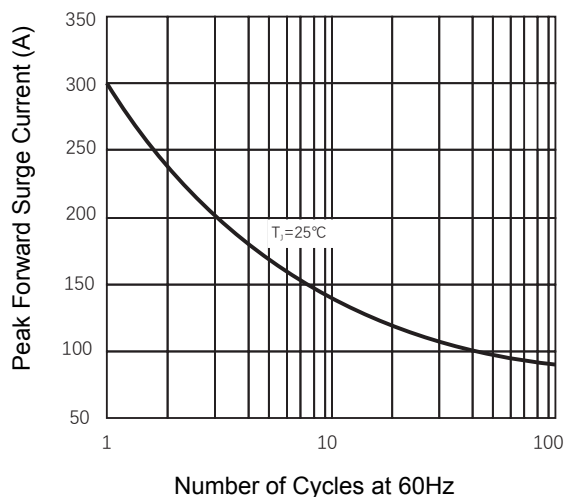


Figure 1. Maximum Forward Surge Current

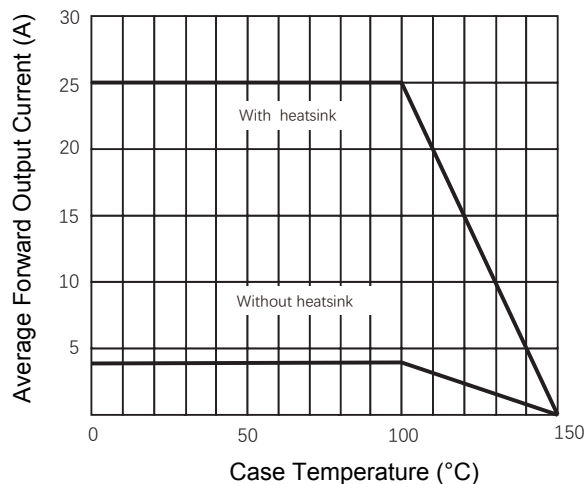


Figure 2. Forward Current Derating Curve

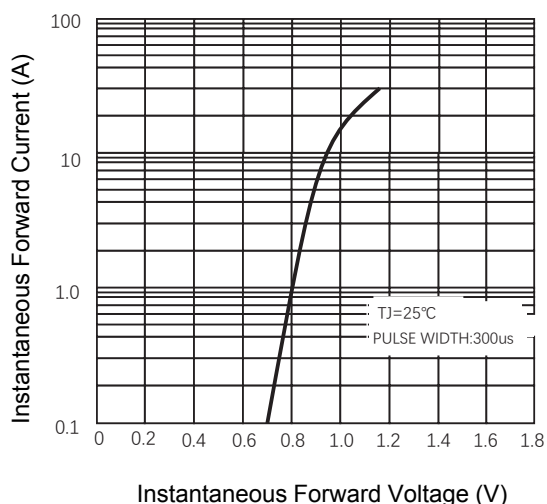


Figure 3. Typical Forward Characteristics

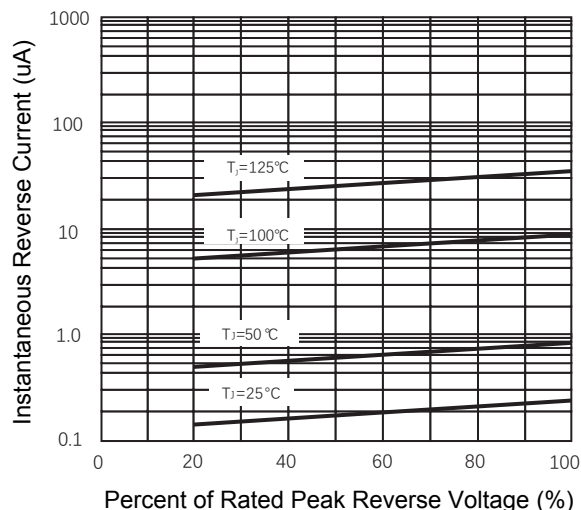
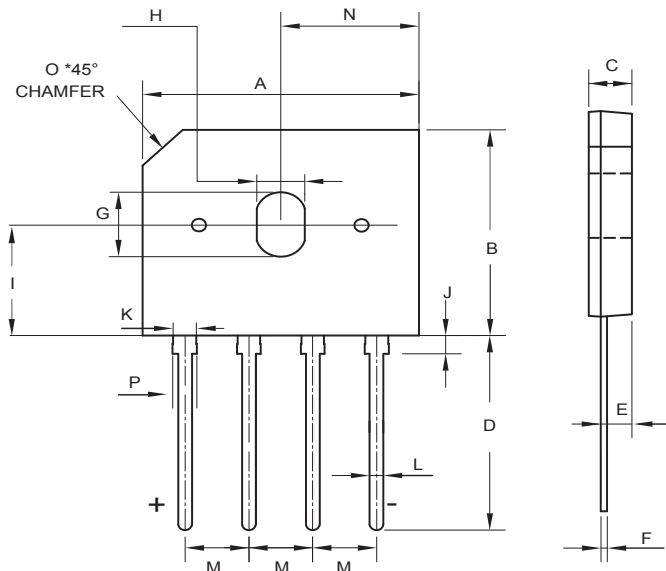


Figure 4. Typical Reverse Characteristics

GSGBU2501 thru GSGBU2510

General Purpose Bridge Rectifiers
Reverse Voltage 100V to 1000V Forward Current 25.0A

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
GSGBU2501	GBU	GBU2501	Tube	20pcs / Tube
GSGBU2502	GBU	GBU2502	Tube	20pcs / Tube
GSGBU2504	GBU	GBU2504	Tube	20pcs / Tube
GSGBU2506	GBU	GBU2506	Tube	20pcs / Tube
GSGBU2508	GBU	GBU2508	Tube	20pcs / Tube
GSGBU2510	GBU	GBU2510	Tube	20pcs / Tube