WON-TOP ELECTRONICS

GBU25A – GBU25M

25A GLASS PASSIVATED SINGLE PHASE BRIDGE RECTIFIER

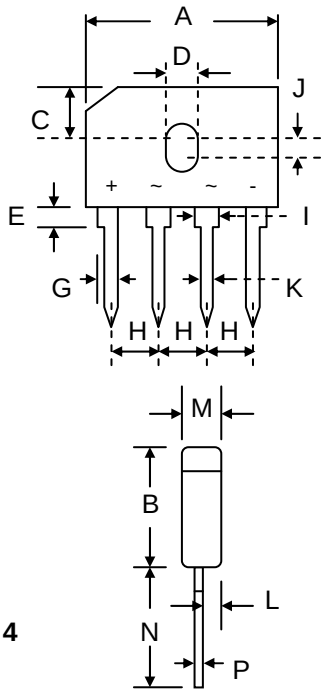
RoHS Pb

Features

- Glass Passivated Die Construction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards
- Plastic Material Has UL Flammability Classification 94V-0

Mechanical Data

- Case: GBU, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 4.0 grams (approx.)
- Mounting Position: Any
- Mounting Torque: 0.8 N.m Max.
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4**



GBU		
Dim	**Min**	**Max**
A	21.80	22.30
B	18.30	18.80
C	7.40	7.90
D	3.50	4.10
E	1.52	2.03
G	2.16	2.54
H	4.83	5.33
I	1.65	2.03
J	1.65	2.16
K	1.02	1.27
L	1.90	2.16
M	3.30	3.56
N	17.50	18.00
P	0.45	0.68
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	GBU 25A	GBU 25B	GBU 25D	GBU 25G	GBU 25J	GBU 25K	GBU 25M	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current @T_C = 60°C (Note 1)	I_O	25							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	300							A
Forward Voltage per leg @I_F = 12.5A	V_{FM}	1.05							V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 125°C	I_{RM}	10 500							μA
I^2t Rating for Fusing (t < 8.3ms)	I^2t	373							A^2s
Typical Junction Capacitance (Note 2)	C_J	125							pF
Thermal Resistance Junction to Ambient (Note 3) Thermal Resistance Junction to Case (Note 1)	$R_{\theta JA}$ $R_{\theta JC}$	20 2.2							°C/W
RMS Isolation Voltage Terminals to Case, t = 1min	V_{ISO}	1500							V
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							°C

Note: 1. Mounted on 100 x 100 x 3.0mm thick Al. heatsink.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
3. Mounted on PCB with 12 x 12mm copper pads and measured at lead length 9.5mm from case.

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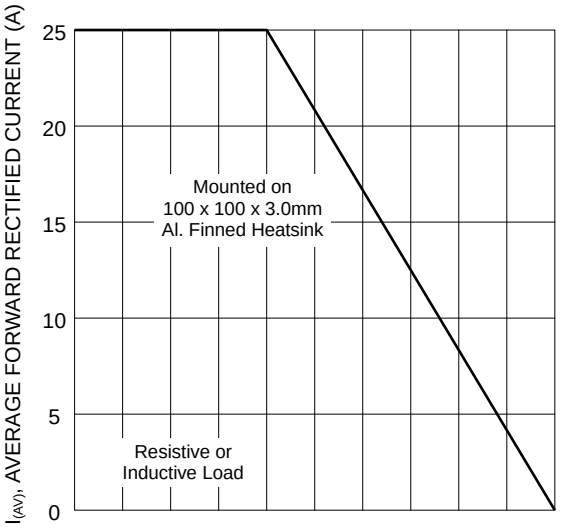


Fig. 1 Forward Current Derating Curve

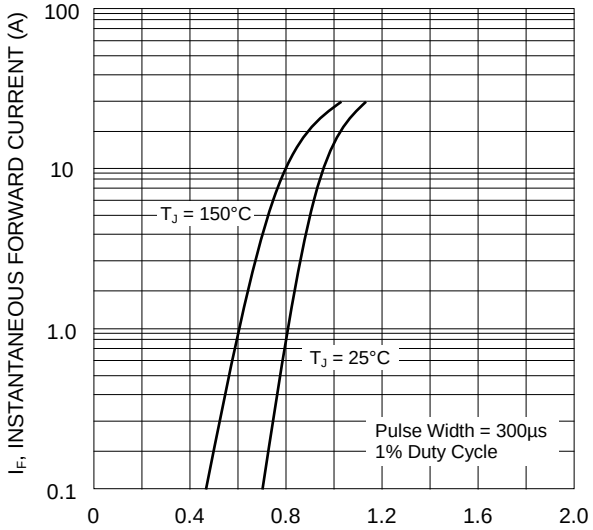


Fig. 2 Typical Forward Characteristics

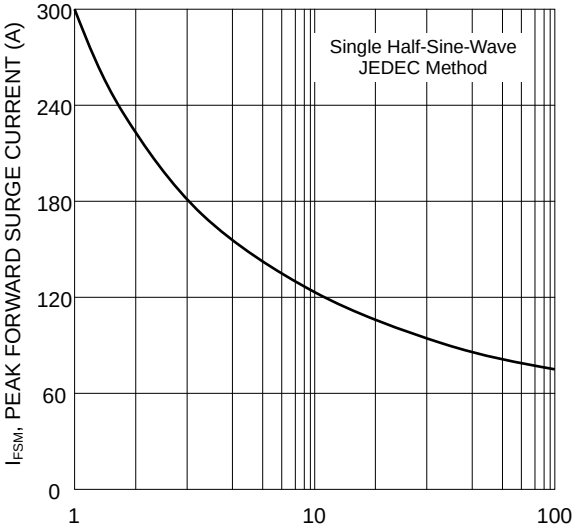


Fig. 3 Forward Surge Current Derating Curve

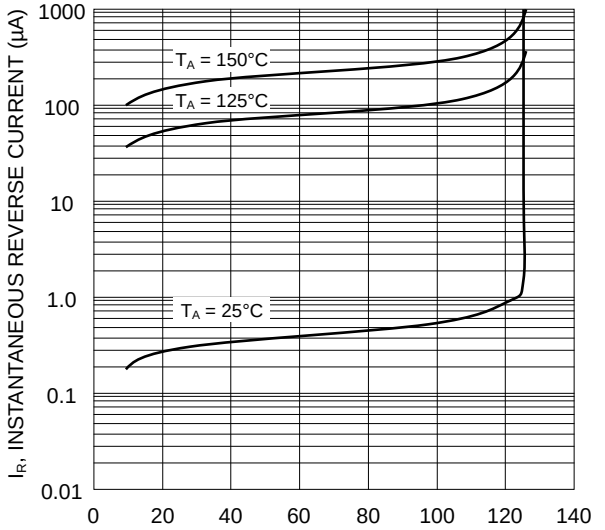


Fig. 4 Typical Reverse Characteristics

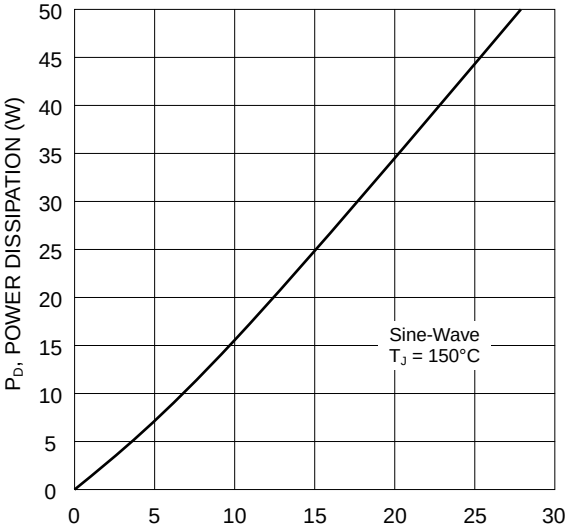


Fig. 5 Forward Power Dissipation

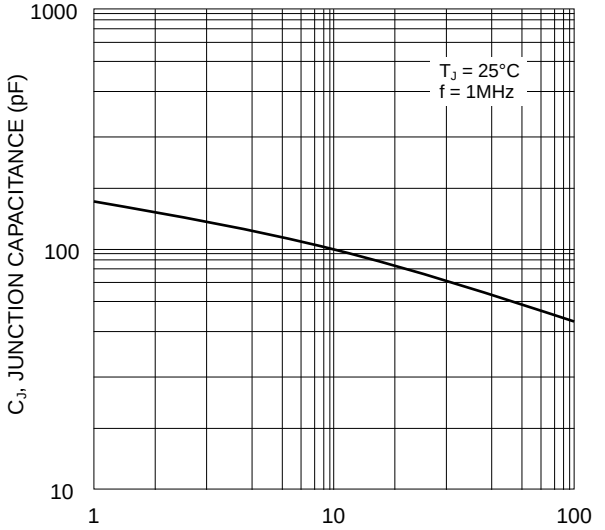
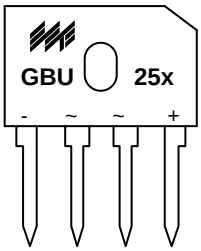


Fig. 6 Typical Junction Capacitance

MARKING INFORMATION



GBU25x	= Device Number
x	= A, B, D, G, J, K or M
Polarity	= As Marked on Body

PACKAGING INFORMATION

BULK

Tube Size L x W x H (mm)	Quantity (PCS)	Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
470 x 42 x 7	20	495 x 150 x 140	1,000	520 x 320 x 170	2,000	14.0

Note: 1. Anti-static tube, water clear color.

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ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
GBU25A	SIL Bridge	20 Units/Tube
GBU25B	SIL Bridge	20 Units/Tube
GBU25D	SIL Bridge	20 Units/Tube
GBU25G	SIL Bridge	20 Units/Tube
GBU25J	SIL Bridge	20 Units/Tube
GBU25K	SIL Bridge	20 Units/Tube
GBU25M	SIL Bridge	20 Units/Tube

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, GBU25A-LF**.

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