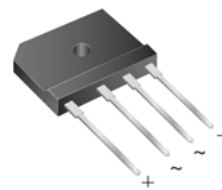


GSGBJ50005H thru GSGBJ5010H

Bridge Rectifiers
 Reverse Voltage 50V to 1000V Forward Current 50.0A

Features

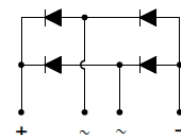
- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Plastic material-UL flammability 94V-0



Package: GBJ

Mechanical Data

- Case: Molded plastic, GBJ
- Terminals: Plated leads solderable per MIL-STD-202, method 208
- Polarity: As marked on case
- Mounting position: Any



Schematic Diagram

Maximum Ratings and Electrical Characteristics

(Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.)

Parameters	Symbol	GSGBJ 50005H	GSGBJ 5001H	GSGBJ 5002H	GSGBJ 5004H	GSGBJ 5006H	GSGBJ 5008H	GSGBJ 5010H	Units
Peak Repetitive Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V_{RWM}								
DC Blocking Voltage	V_{DC}								
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Average Rectified Output Current @ $T_C=90^\circ C^1$	$I_{F(AV)}$	50.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	450							A
I^2t Rating for Fusing ($t < 8.3ms$)	I^2t	840.375							A^2s
Forward Voltage per Element @ $I_F=25A$	V_{FM}	1.1							V
Peak Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ C$	10							uA
	$T_A=125^\circ C$	500							
Typical Junction Capacitance per Leg	C_J	75							pF
Between Junction and Ambient, Without Heatsink	$R_{\theta JA}$	22							$^\circ C/W$
Between Junction and Case, With Heatsink	$R_{\theta JC}$	0.8							
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							$^\circ C$

Notes:

1. Unit case mounted on aluminum plate heatsink.

Ratings and Characteristics Curves

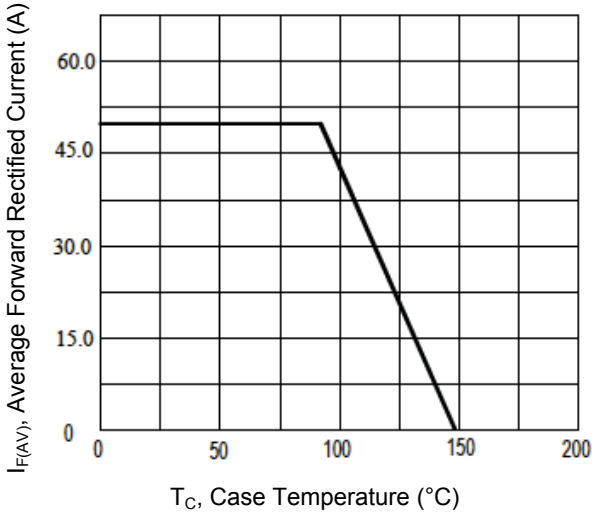


Figure 1. Output Current Derating Curve

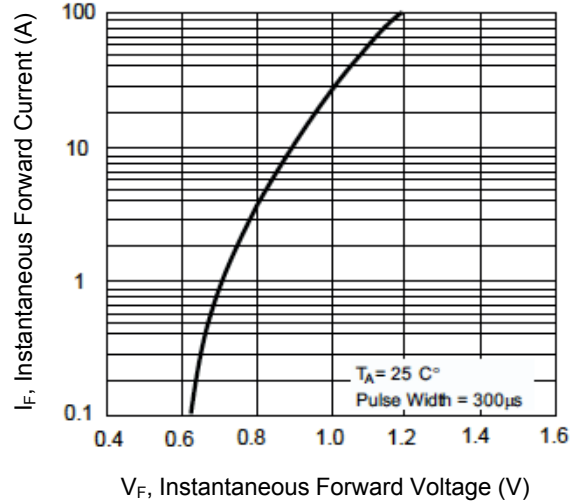


Figure 2. Typical Forward Characteristics (per leg)

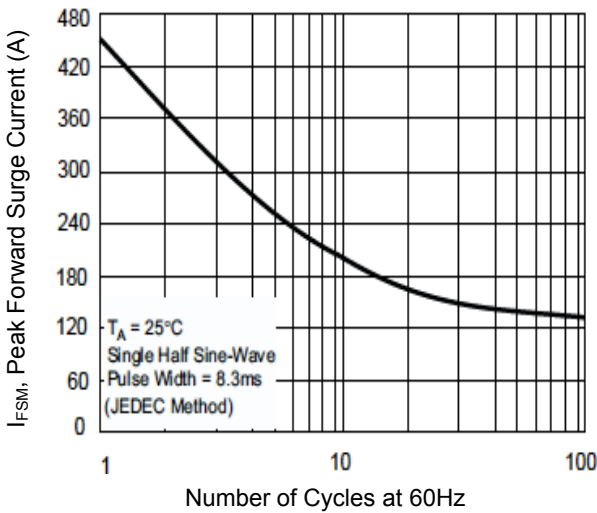


Figure 3. Maximum Peak Forward Surge Current (per leg)

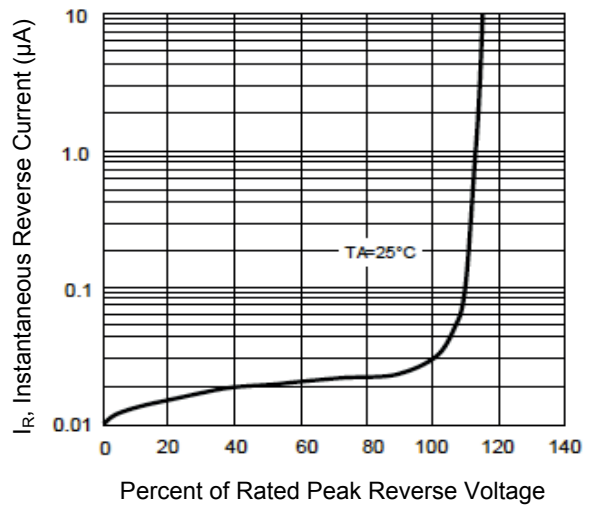


Figure 4. Typical Junction Capacitance

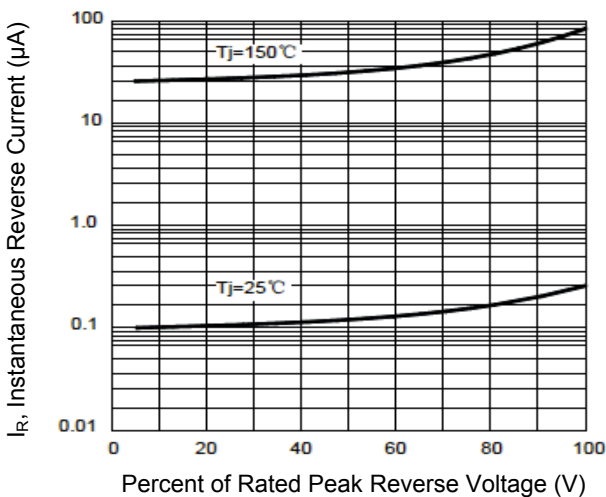


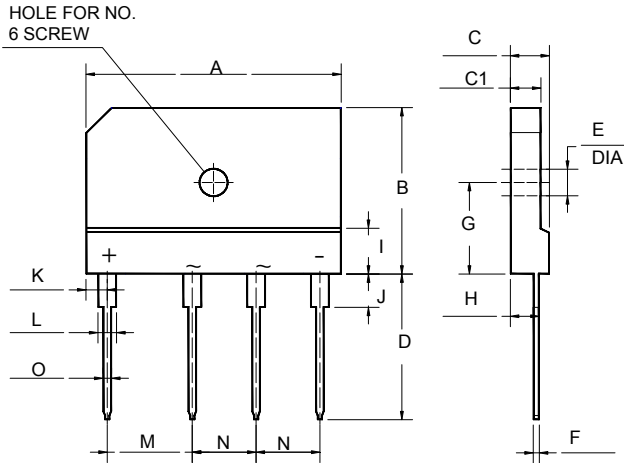
Figure 5. Typical Reverse Characteristics

GSGBJ50005H thru GSGBJ5010H

Bridge Rectifiers

Reverse Voltage 50V to 1000V Forward Current 50.0A

Package Outline Dimensions (GBJ)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	29.70	30.30	1.169	1.193
B	19.70	20.30	0.776	0.799
C	4.40	4.80	0.173	0.189
C1	3.40	3.80	0.134	0.150
D	16.00	18.00	0.630	0.709
E	3.10	3.40	0.122	0.134
F	0.50	0.70	0.020	0.028
G	10.80	11.20	0.425	0.441
H	2.40	2.80	0.094	0.110
I	4.80	5.20	0.189	0.205
J	3.80	4.20	0.150	0.165
K	2.30	2.70	0.091	0.106
L	2.00	2.30	0.079	0.091
M	9.00	11.00	0.354	0.433
N	7.30	7.70	0.287	0.303
O	0.90	1.10	0.035	0.043