



E502650

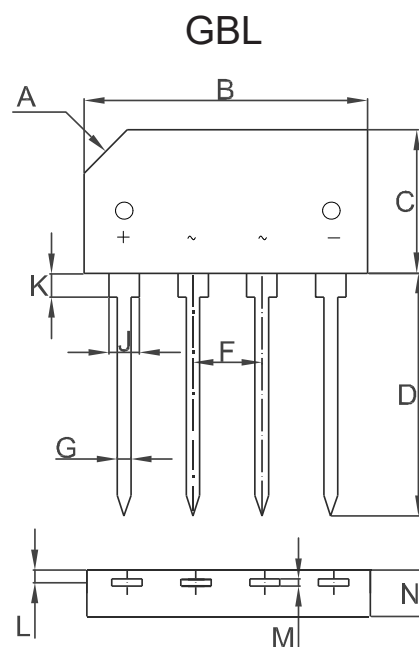
Features

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Glass Passivated Chip Junction
- High Surge Forward Current Capability
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant (Note 1) ("P" Suffix Designates RoHS Compliant. See Ordering Information)

2 Amp Single-Phase Bridge Rectifier 1000 Volts

Maximum Ratings @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Value	Unit
		GBL210S	
Peak Repetitive Reverse Voltage	V_{RRM}	1000	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
RMS Reverse Voltage	V_{RMS}	700	V
Average Rectified Forward Current @ $T_A=25^\circ\text{C}$	$I_{F(AV)}$	2	A
Non-Repetitive Peak Surge Current @ 8.3ms Half Sine Wave	I_{FSM}	90	A
Non-Repetitive Peak Surge Current @ 1ms Square Wave		180	
I^2t Rating for Fusing @ $1\text{ms} \leq t \leq 8.3\text{ms}$	I^2t	33.6	A^2s
Dielectric strength @ Terminals to Case, AC 1 Minute	V_{dis}	2.0	KV



Internal Structure

Simplified Outline	Graphic Symbol

Note: 1. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.118	0.118	3.0	3.0	X 45°
B	0.756	0.835	19.20	21.20	
C	0.413	0.453	10.50	11.50	
D	0.512	0.591	13.00	15.00	
F	0.193	0.201	4.90	5.10	
G	0.039	0.047	1.00	1.20	
J	0.047	0.071	1.20	1.80	
K	0.079	0.118	2.00	3.00	
L	0.035	0.043	0.90	1.10	
M	0.020	0.027	0.50	0.70	
N	0.118	0.157	3.00	4.00	

Thermal characteristics

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
T_J	Operating Junction Temperature Range		-55		150	°C
T_{stg}	Storage Temperature Range		-55		150	°C
$R_{th(J-C)}$	Thermal Resistance from Junction to Case			10		°C/W
$R_{th(J-A)}$	Thermal Resistance from Junction to Ambient			47		°C/W

Electrical Characteristics @ 25°C Unless Otherwise Specified(Per Diode)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=1A; T_J=25^{\circ}C$			1.0	V
Reverse Current	I_R	at Rated $V_R; T_J=25^{\circ}C$ at Rated $V_R; T_J=125^{\circ}C$			5 100	μA
Junction Capacitance	C_J	$V_R=4V; f=1MHz; T_J=25^{\circ}C$		25		pF

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

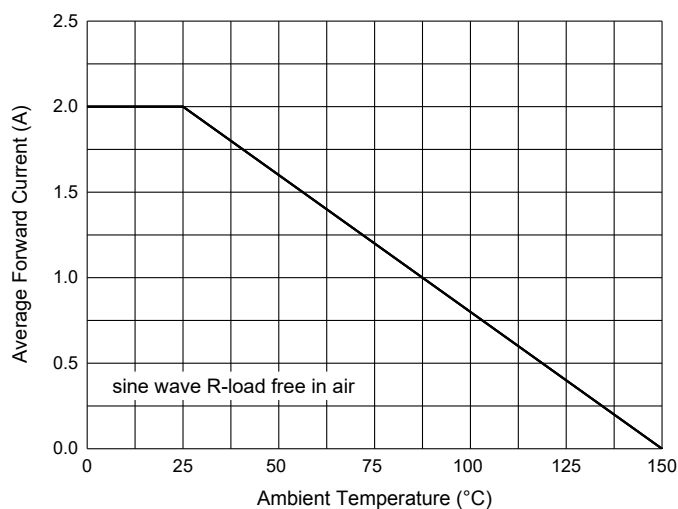


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

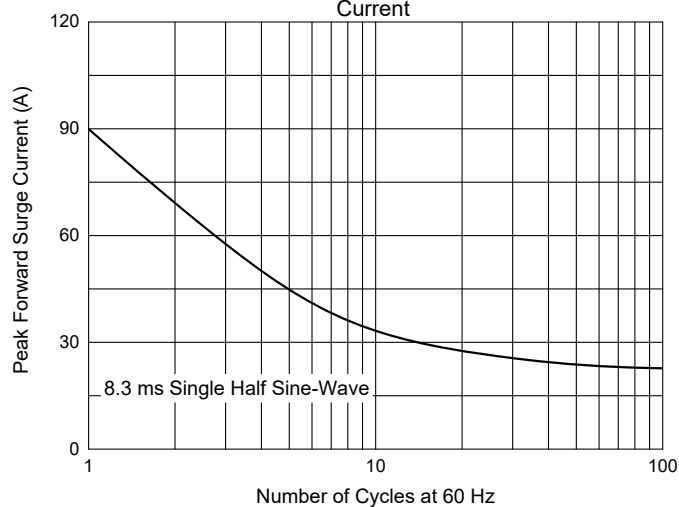


Fig. 3 - Typical Forward Characteristics

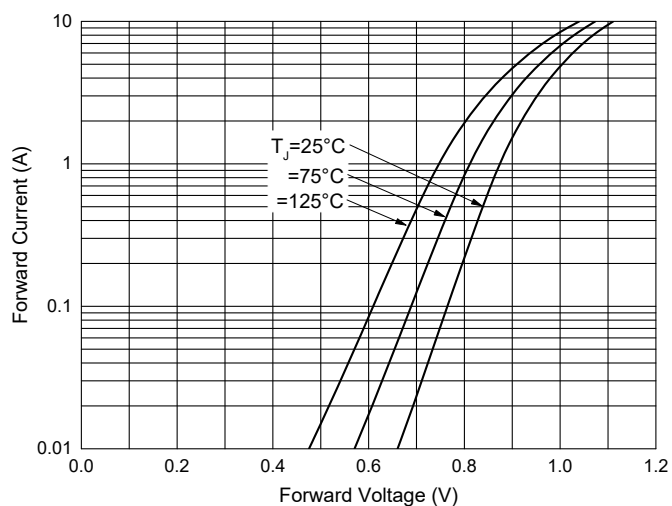


Fig. 4 - Typical Reverse Leakage Characteristics

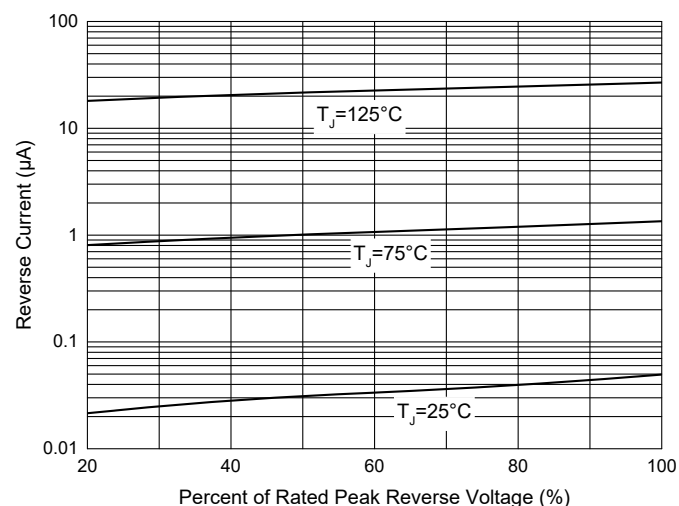
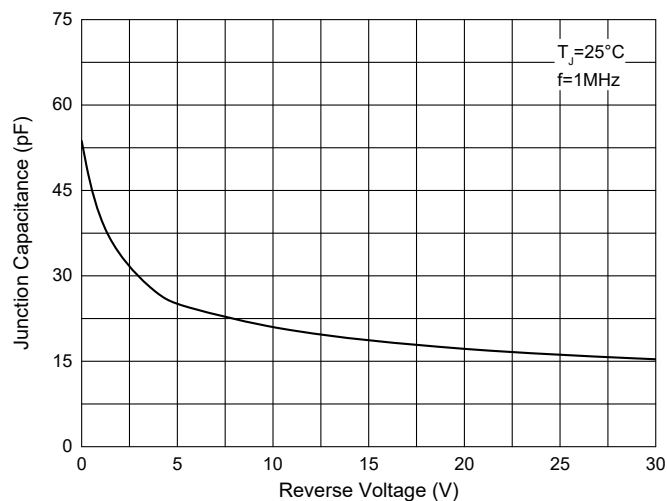


Fig. 5 - Typical Capacitance Characteristics



Ordering Information

Device	Packing
GBL210S-BP	Bulk:22pcs/Tube, 1100pcs/Box, 4400pcs/Carton

Note : Adding "-HF" Suffix For Halogen Free, eg. GBL210S-BP-HF

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