



4A GLASS PASSIVATED BRIDGE RECTIFIER

Features

- Glass Passivated Die Construction
- Rating to 1,000V PRV
- Low Reverse Leakage Current
- Surge Overload Rating to 150A Peak
- Ideal for Printed Circuit Board Applications
- Lead-Free Finish; RoHS Compliant (Notes 1 & 2)
- Halogen and Antimony Free. "Green" Device (Note 3)

Mechanical Data

- Case: GBL
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Matte Tin Finish. Solderable per MIL-STD 202, Method 208 63
- Polarity: Marked on Body, See "Marking Information" Below
- Marking: Date Code and Type Number
- Weight: 2.52 grams (Approximate)

Ordering Information (Note 4)

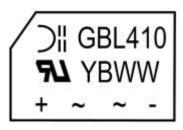
Part Number	Qualification	Case	Packaging
GBL410_HF	Commercial	GBL	25/Tube

Notes:

- 1. EU Directive 2002/95/EC (RoHS) & 2011/65/EU (RoHS 2) compliant. All applicable RoHS exemptions applied.
- 2. See http://www.diodes.com/quality/lead_free.html for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
- 3. Halogen- and Antimony-free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
- 4. For packaging details, go to our website at http://www.diodes.com/products/packages.html.

Marking Information

GBL_HF





Maximum Ratings and Electrical Characteristics (@TA = +25°C, unless otherwise specified.)

Single phase, half wave, 60Hz, resistive or inductive load.

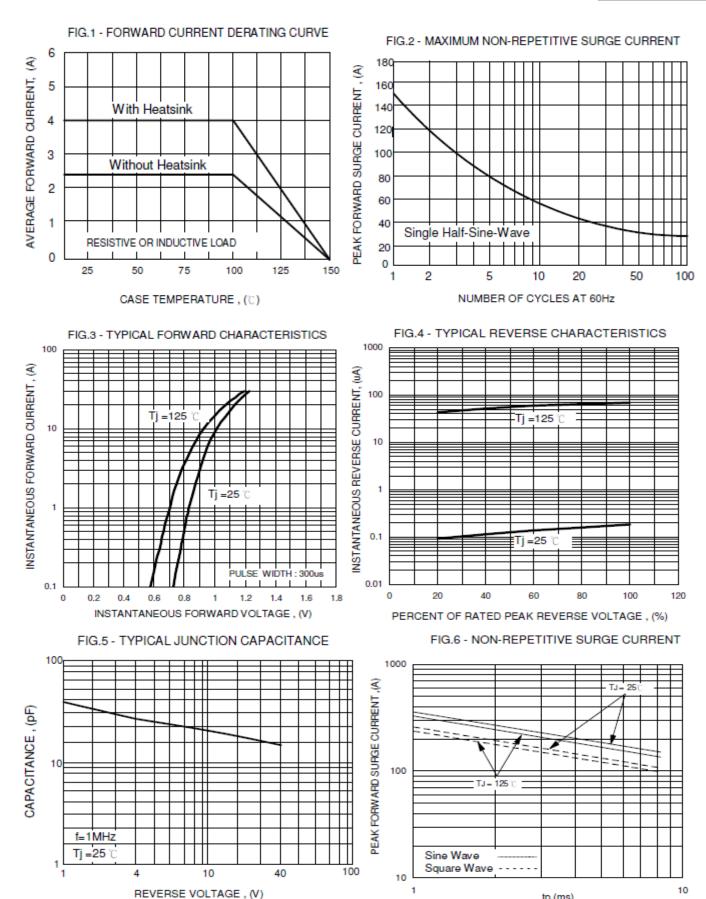
For capacitive load, derate current by 20%.

Characteristic		Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		V _{RRM} V _{RWM} V _R	1,000	V
RMS Reverse Voltage		V _{R(RMS)}	700	V
IAVERAGE FORWARD RECTIFIED CHIPPENT (NOTE 5)	With Heatsink Without Heatsink	I _(AV)	4.0 2.4	А
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rat	ed Load	I _{FSM}	150	А
Forward Voltage (Per Element)	@ I _F = 2.0A	V_{FM}	1.0	V
Peak Reverse Current at Rated DC Blocking Voltag	e @T _J = +25°C @TJ = +125°C	I _R	5 500	μA
I ² t Rating for Fusing (Note 6)		l ² t	93	A ² s
Typical Total Capacitance per Element (Note 7)		C _T	35	pF
Typical Thermal Resistance Junction to Case (Note 5)		$R_{ heta JC}$	4.2	°C/W
Typical Thermal Resistance Junction to Lead			4.0	°C/W
Typical Thermal Resistance Junction to Ambient (Note 5)		$R_{\theta JA}$	10	°C/W
Operating and Storage Temperature Range		$T_{J_1}T_{STG}$	-55 to +150	°C

Notes:

- 5. Unit mounted on 50x50x1.6mm Cu plate heatsink.
 6. Non-repetitive, for t > 3.0ms and < 8.3ms.
 7. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.





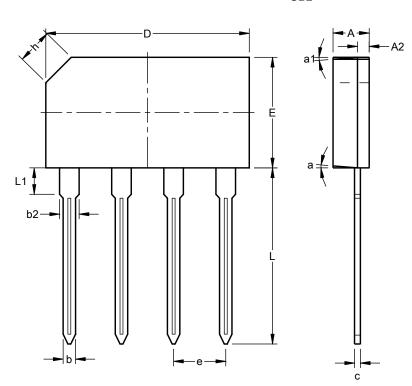
tp,(ms)



Package Outline Dimensions

Please see http://www.diodes.com/package-outlines.html for the latest version.

GBL



	GBL						
Dim	Min	Max	Тур				
Α	3.30	3.70					
A2	0.80	1.20					
b	1.02	1.27					
b2	1.95	2.35					
С	0.40	0.60					
D	20.20	20.80					
Е	10.70	11.30					
е	4.83	5.33					
h			0.35				
L	17.50	18.00					
L1	2.30	2.70					
а		5°					
a1		5°					
All Dimensions in mm							



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