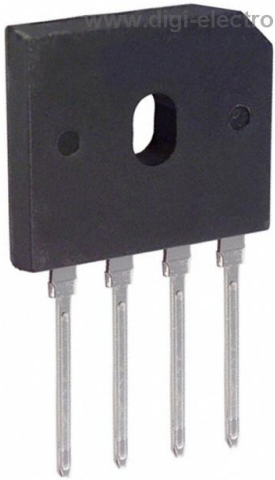


GBU404 Datasheet



<https://www.DiGi-Electronics.com>

DiGi Electronics Part Number	GBU404-DG
Manufacturer	Diodes Incorporated
Manufacturer Product Number	GBU404
Description	BRIDGE RECT 1PHASE 400V 4A GBU
Detailed Description	Bridge Rectifier Single Phase Standard 400 V Through Hole GBU



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

GBU404

Series:

-

Diode Type:

Single Phase

Voltage - Peak Reverse (Max):

400 V

Voltage - Forward (Vf) (Max) @ If:

1 V @ 2 A

Operating Temperature:

-55°C ~ 150°C (TJ)

Package / Case:

4-SIP, GBU

Base Product Number:

GBU404

Manufacturer:

Diodes Incorporated

Product Status:

Active

Technology:

Standard

Current - Average Rectified (Io):

4 A

Current - Reverse Leakage @ Vr:

5 μ A @ 400 V

Mounting Type:

Through Hole

Supplier Device Package:

GBU

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8541.10.0080

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99



GBU4005 - GBU410

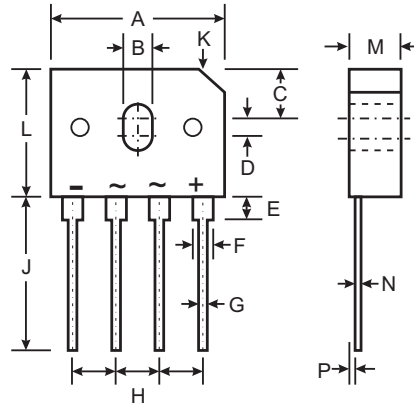
4.0A GLASS PASSIVATED BRIDGE RECTIFIER

Features

- Glass Passivated Die Construction
- High Case Dielectric Strength of 1500VRMS
- Low Reverse Leakage Current
- Surge Overload Rating to 150A Peak
- Ideal for Printed Circuit Board Applications
- UL Listed Under Recognized Component Index, File Number E94661
- **Lead Free Finish, RoHS Compliant (Note 4)**

Mechanical Data

- Case: GBU
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Terminals: Plated Leads. Solderable per MIL-STD-202, Method 208 (E3)
- Lead Free Plating (Tin Finish)
- Polarity: Marked on Body
- Mounting: Through Hole for #6 Screw
- Mounting Torque: 5.0 Inch-pounds Maximum
- Ordering Information: See Last Page
- Marking: Date Code and Type Number
- Weight: 6.6 grams (approximate)



GBU		
Dim	Min	Max
A	21.8	22.3
B	3.5	4.1
C	7.4	7.9
D	1.65	2.16
E	2.25	2.75
F	1.95	2.35
G	1.02	1.27
H	4.83	5.33
J	17.5	18.0
K	3.2 X 45°	
L	18.3	18.8
M	3.30	3.56
N	0.46	0.56
P	0.76	1.0
All Dimensions in mm		

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

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

Characteristic	Symbol	GBU 4005	GBU 401	GBU 402	GBU 404	GBU 406	GBU 408	GBU 410	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V _{RWM}								
DC Blocking Voltage	V _R								
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Forward Rectified Current (Note 1) @ T _C = 100°C	I _(AV)					4.0			A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{FSM}					150			A
Forward Voltage (per element) @ I _F = 2.0A	V _{FM}					1.0			V
Peak Reverse Current @ T _C = 25°C at Rated DC Blocking Voltage @ T _C = 125°C	I _R					5.0 50			μA
I ² t Rating for Fusing (Note 2)	I ² t					93			A ² s
Typical Total Capacitance per Element (Note 3)	C _T					80			pF
Typical Thermal Resistance Junction to Case (Note 1)	R _{θJC}					2.2			°C/W
Operating and Storage Temperature Range	T _j , T _{STG}					-55 to +150			°C

- Notes:
1. Unit mounted on 50mm x 50mm x 1.6mm copper plate heatsink.
 2. Non-repetitive, for t > 1.0ms and < 8.3ms.
 3. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
 4. RoHS revision 13.2.2003. Glass and High Temperature Solder Exemptions Applied, see EU Directive Annex Notes 5 and 7.

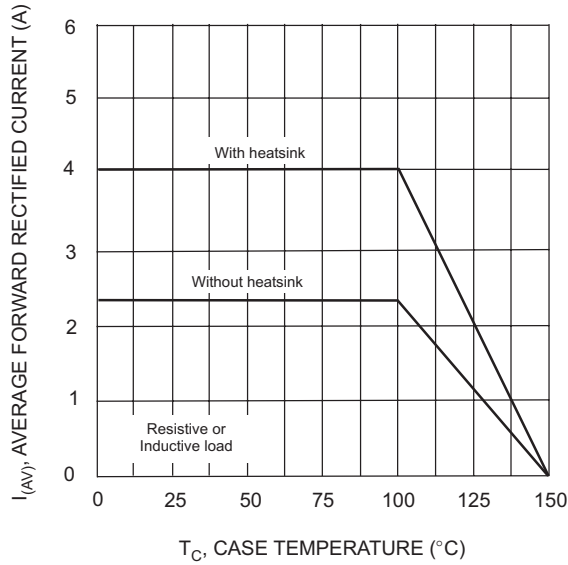


Fig. 1 Forward Current Derating Curve

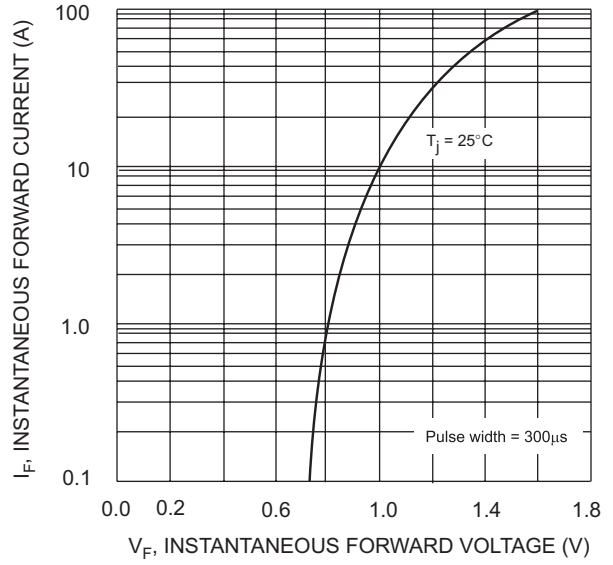


Fig. 2 Typical Forward Characteristics, per element

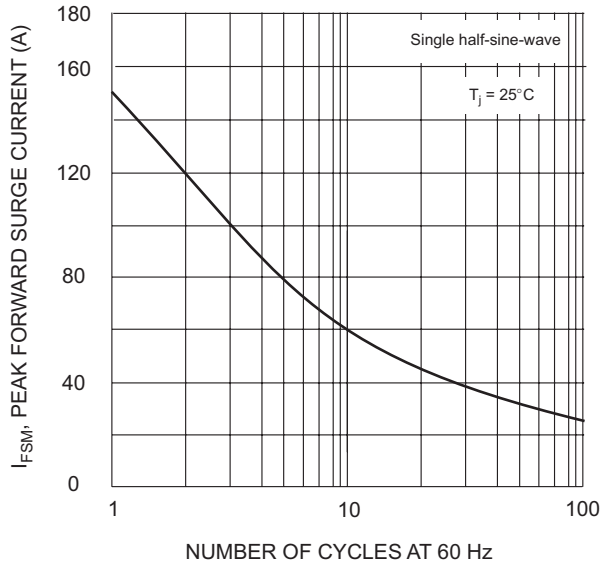


Fig. 3 Maximum Non-Repetitive Surge Current

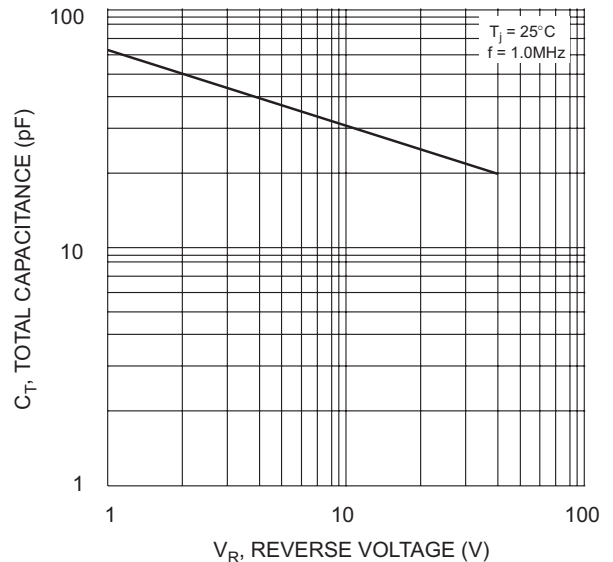


Fig. 4 Typical Total Capacitance, per element

Ordering Information (Note 5)

Device	Packaging	Shipping
GBU4005	GBU	20/Tube
GBU401	GBU	20/Tube
GBU402	GBU	20/Tube
GBU404	GBU	20/Tube
GBU406	GBU	20/Tube
GBU408	GBU	20/Tube
GBU410	GBU	20/Tube

Notes: 5. For packaging details, visit our website at <http://www.diodes.com/datasheets/ap02008.pdf>

IMPORTANT NOTICE

Diodes Incorporated and its subsidiaries reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. Diodes Incorporated does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold Diodes Incorporated and all the companies whose products are represented on our website, harmless against all damages.

LIFE SUPPORT

Diodes Incorporated products are not authorized for use as critical components in life support devices or systems without the expressed written approval of the President of Diodes Incorporated.

OUR CERTIFICATE

DiGi provide top-quality products and perfect service for customer worldwide through standardization, technological innovation and continuous improvement. DiGi through third-party certification, we stricly control the quality of products and services. Welcome your RFQ to

Email: Info@DiGi-Electronics.com



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.