ANTREX Electronics

Electronic Components Sourcing Information

Product Reference Information

Part Number:	GBJ1008-F
Manufacturer:	Diodes Incorporated
Package:	4-SIP, GBJ
Availability:	Please confirm with sales

Product Page:

https://antrexco.com/product/details/diodes-incorporated/gbj1008-f.html

Request a Quote:

Submit RFQ for this part

Scan for product page

Contact Information

Email: info@antrexco.com

WhatsApp: +86-186-8066-5326

Website: https://antrexco.com

Quality & Trust

New & Original Components

Supplier verification and packaging condition review

CoC / RoHS / REACH documents available on request

Secure sourcing support for OEM / EMS projects

Note:

This PDF includes an ANTREX product reference cover page.

The original manufacturer datasheet follows from the next page.

10A STANDARD RECOVERY BRIDGE RECTIFIER

Product Summary

V_{RRM} (V)	I_F (A)	V_F Max (V) @ I_F = 5A	I_R Max (µA)
50/100/200/ 400/600/800/1000	10	1.05	10

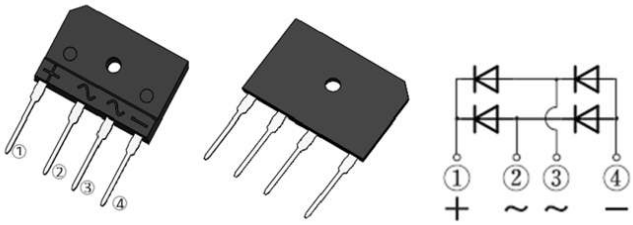
Features

- Glass Passivated Die Construction
- High Case Dielectric Strength of 1500V_{RMS}
- Low Reverse Leakage Current
- Surge Overload Rating to 170A Peak
- Ideal for Printed Circuit Board Applications
- UL Listed Under Recognized Component Index, File Number E95060
- **Lead-Free Finish; RoHS Compliant (Notes 1 & 2)**
- **For automotive applications requiring specific change control (i.e. parts qualified to AEC-Q100/101/104/200, PPAP capable, and manufactured in IATF 16949 certified facilities), please contact us or your local Diodes representative. https://www.diodes.com/quality/product-definitions/**

Mechanical Data

- Package: GBJ
- Package Material: Plastic Material, UL Flammability Classification 94V-0
- Terminals: Finish – Bright Tin Plated Leads, Solderable per MIL-STD-202, Method 208 e3
- Polarity: Molded on Body
- Mounting: Through Hole for #6 Screw
- Mounting Torque: 5.0 in-lbs Maximum
- Weight: 6.6 grams (Approximate)

GBJ

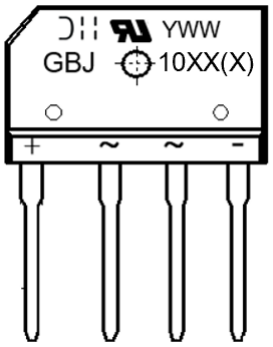


Ordering Information (Note 3)

Orderable Part Number	Package	Packing	
		Qty.	Carrier
GBJ10005-F	GBJ	15	Tube
GBJ1001-F	GBJ	15	Tube
GBJ1002-F	GBJ	15	Tube
GBJ1004-F	GBJ	15	Tube
GBJ1006-F	GBJ	15	Tube
GBJ1008-F	GBJ	15	Tube
GBJ1010-F	GBJ	15	Tube

Notes:
1. EU Directive 2002/95/EC (RoHS), 2011/65/EU (RoHS 2) & 2015/863/EU (RoHS 3) compliant. All applicable RoHS exemptions applied.
2. See https://www.diodes.com/quality/lead-free/ for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
3. For packaging details, go to our website at https://www.diodes.com/design/support/packaging/diodes-packaging/.

Marking Information



GBJ10XX = Product Type Marking Code, ex: GBJ1001, GBJ1002, GBJ1004, GBJ1006, GBJ1008, GBJ1010
GBJ10XXX = Product Type Marking Code, ex: GBJ10005
= Manufacturer's Code Marking
YWW = Date Code Marking
Y = Last Digit of Year (ex: 6 = 2026)
WW = Week Code (01 to 53)

Maximum Ratings (@ T_A = +25°C, unless otherwise specified.)

Characteristic		Symbol	GBJ10005	GBJ1001	GBJ1002	GBJ1004	GBJ1006	GBJ1008	GBJ1010	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		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 Forward Rectified Output Current	@ T_C = +110°C	I_O	10							A
Non-Repetitive Peak Forward Surge Current, 8.3ms Single Half-Sine Wave Superimposed on Rated Load		I_{FSM}	170							A
I^2t Rating for Fusing (t = 8.3ms)		I^2t	120							A^2s
Operating and Storage Temperature Range		T_J, T_{STG}	-55 to +150							°C

Electrical Characteristics (@T_A = +25°C, unless otherwise specified.)

Characteristic	Test Conditions		Symbol	Min	Typ	Max	Unit
Breakdown Voltage	I_R = 10μA, T_A = +25°C		V_B	50/100/200/400 /600/800/1000	—	—	V
Forward Voltage	I_F = 5.0A, T_A = +25°C		V_F	—	—	1.05	V
Leakage Current	V_R at Rated	T_C = +25°C T_C = +125°C	I_R	— —	— —	10 500	μA
Typical Total Capacitance per Element (Note 4)			C_T	55			pF

Thermal Characteristics

Characteristic	Symbol	Typ	Unit
Typical Thermal Resistance (Note 5)	$R_{\theta JC}$	1.4	°C/W

Notes: 4. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
5. Thermal resistance from junction to case per element. Unit mounted on 150mm x 150mm x 1.6mm copper plate heatsink.

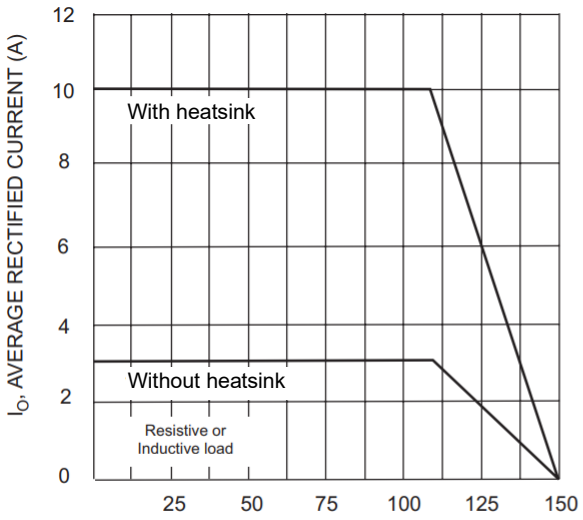


Fig. 1 Forward Current Derating Curve

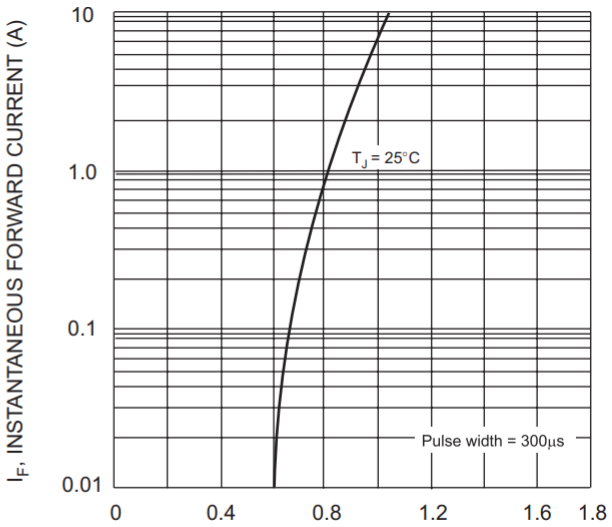


Fig. 2 Typical Forward Characteristics (per element)

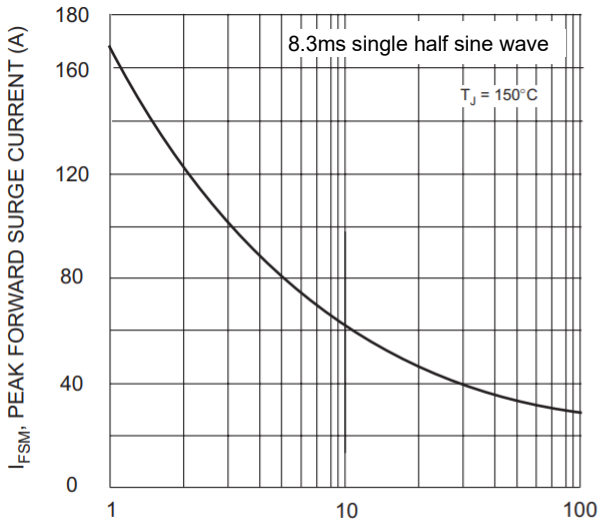


Fig. 3 Maximum Non-Repetitive Surge Current

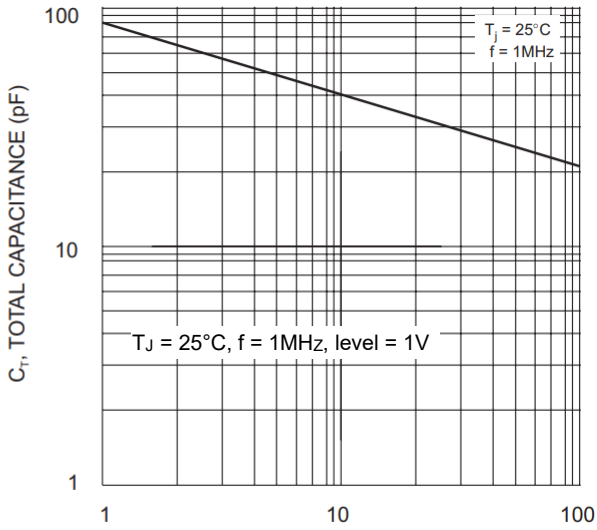


Fig. 4 Typical Total Capacitance, Per Element

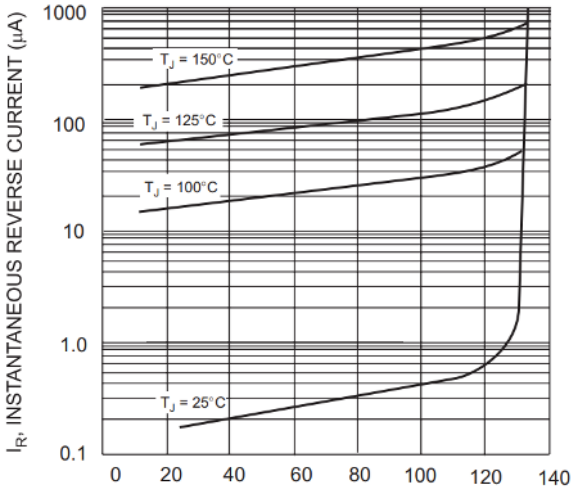
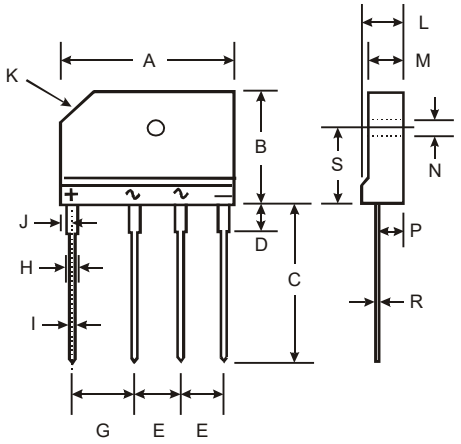


Fig. 5 Typical Reverse Characteristics

Package Outline Dimensions

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

GBJ



GBJ		
Dim	**Min**	**Max**
A	29.70	30.30
B	19.70	20.30
C	17.00	18.00
D	3.80	4.20
E	7.30	7.70
G	9.80	10.20
H	2.00	2.40
I	0.90	1.10
J	2.30	2.70
K	3.0 X 45°	
L	4.40	4.80
M	3.40	3.80
N	3.10	3.40
P	2.50	2.90
R	0.60	0.80
S	10.80	11.20
All Dimensions in mm		

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