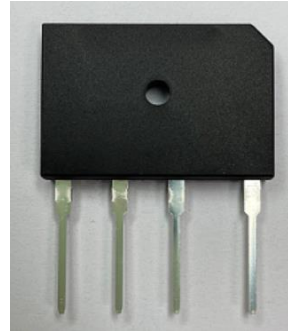
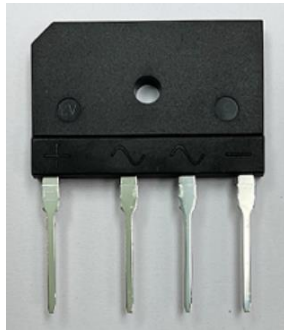


Product Summary

V_{RRM} (V)	I_F (AV)	V_F Max (V) @ $I_F = 7.5A$	I_R Max (μA)
600	15	1.05	1

Mechanical Data

- Package: GBJ
- Package Material: Plastic Material, UL Flammability Classification 94V-0
- Terminals: Finish – Matte Tin Plated Leads, Solderable Per MIL-STD-202, Method 208 (E3)
- Polarity Indicator: Symbol Molded On Body
- Weight: 6.60 grams (Approximate)



Features

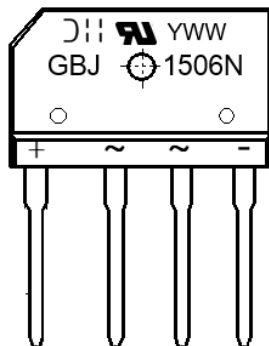
- Glass Passivated Die Construction
- Low Forward Voltage Drop
- Ideal for Printed Circuit Board
- High Surge Current Capability
- UL Recognized File # E94661
- Lead-Free Finish; RoHS Compliant (Notes 1 & 2)**
- Halogen and Antimony Free. "Green" Device (Note 3)**
- For automotive applications requiring specific change control (i.e. parts qualified to AEC-Q100/101/200, PPAP capable, and manufactured in IATF 16949 certified facilities), please [contact us](mailto:contact@diodes.com) or your local Diodes representative. <https://www.diodes.com/quality/product-definitions/>**

Ordering Information (Note 4)

Part Number	Qualification	Package	Packing	
			Qty.	Carrier
GBJ1506N-TU	Commercial	GBJ	15	Tube

- Notes:
- EU Directive 2002/95/EC (RoHS), 2011/65/EU (RoHS 2) & 2015/863/EU (RoHS 3) compliant. All applicable RoHS exemptions applied.
 - 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.
 - Halogen- and Antimony-free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
 - For packaging details, go to our website at <https://www.diodes.com/design/support/packaging/diodes-packaging/>.

Marking Information



GBJ1506N = Product Type Marking Code
 JII = Manufacturer's Code Marking
 YWW = Date Code Marking
 Y = Last Digit of Year (ex: 1 = 2021)
 WW = Week Code (01 to 53)

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

Characteristic	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	600	V
Average Rectified Output Current @ T _C = +95°C	I _{F(AV)}	15 4.2	A
Peak Forward Surge Current 8.3ms Single Half Sine Wave	I _{FSM}	240	A
Operating Temperature Range	T _J	-40 to +150	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

Electrical Characteristics

Characteristic	Test Conditions	Symbol	Min	Max	Unit
Breakdown Voltage	I _R = 1μA T _J = +25°C	V _B	600	—	V
Forward Voltage	I _F = 7.5A T _J = +25°C	V _F	—	1.05	V
Leakage Current	V _R = 600V T _J = +25°C T _J = +125°C	I _R	— —	1 500	μA

Thermal Characteristics

Characteristic	Symbol	Typ	Unit
Typical Thermal Resistance (Note 5)	R _{θJC}	2.5	°C/W
	R _{θJL}	4.0	
	R _{θJA}	10	

Note: 5. Thermal resistance junction to case, lead and ambient. Device mounted on 250mm x 250mm x 10mm Cu plate heatsink.

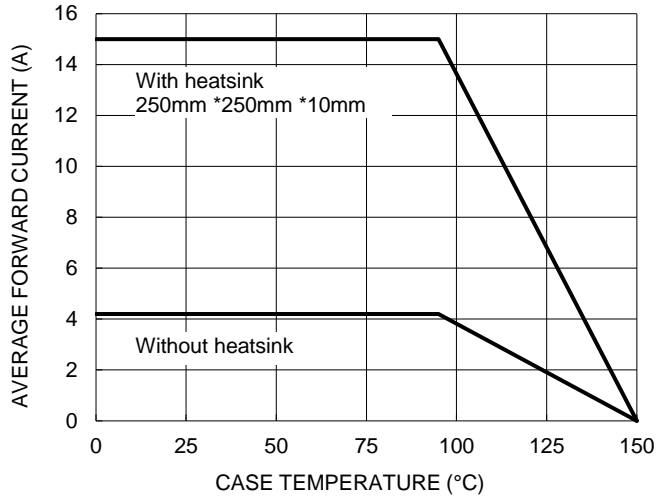


Figure 1. Forward Current Derating Curve

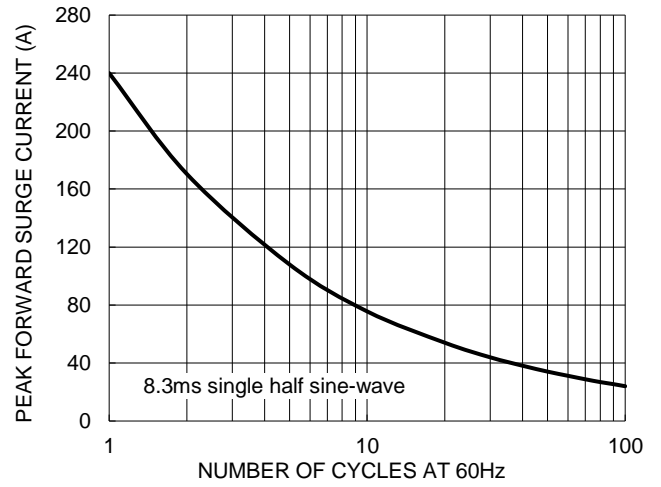


Figure 2. Maximum Non-Repetitive Surge Current

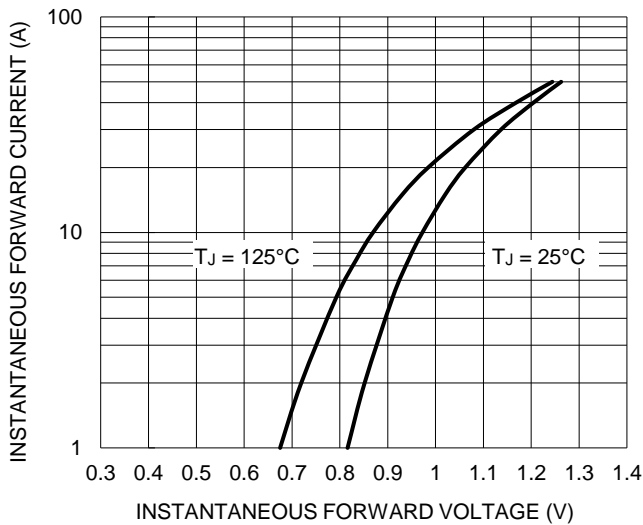


Figure 3. Typical Forward Characteristics

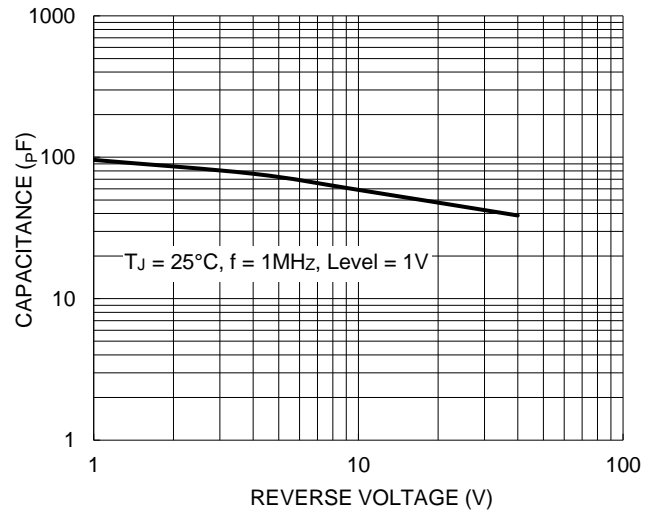


Figure 4. Typical Junction Capacitance

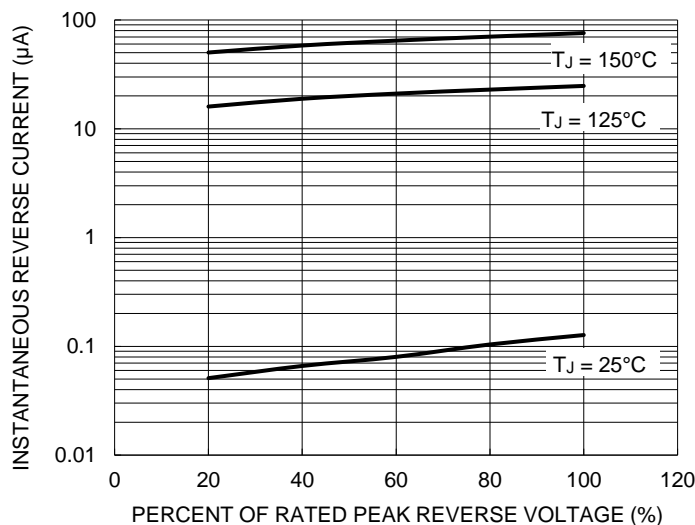
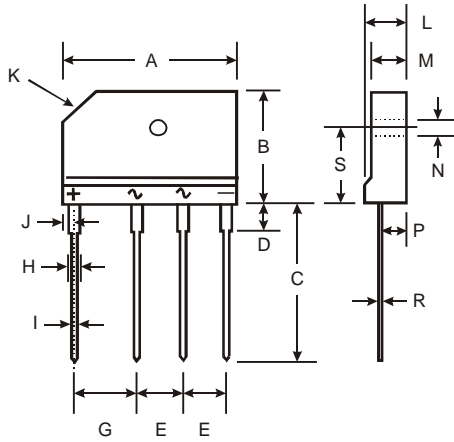


Figure 5. Typical Reverse Characteristics

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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