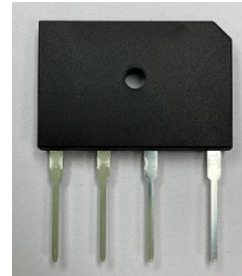
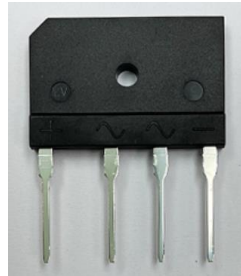


Product Summary

V _{RRM} (V)	I _F (A)	V _F Max (V) @ I _F = 7.5A	I _R Max (μA)
1000	15	0.92	5

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 Ⓢ
- Polarity Indicator: Symbol Molded On Body
- Weight: 6.60 grams (Approximate)



Features

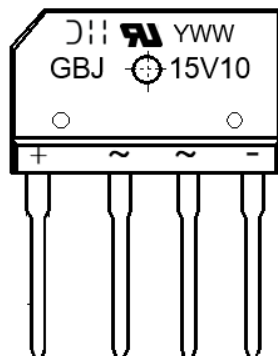
- Glass Passivated Die Construction
- Low Forward Voltage Drop
- Ideal For Printed Circuit Board
- High Surge Current Capability
- UL Recognized File # E94661
- Lead-Free Finish; RoHS Compliant (Notes 1 & 2)**
- Halogen and Antimony Free. "Green" Device (Note 3)**
- For automotive applications requiring 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
GBJ15V10-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



GBJ15V10 = Product Type Marking Code
 YWW = Date Code Marking
 Y = Last Digit of Year (ex: 2 = 2022)
 WW = Week Code (01 to 53)

Maximum Ratings (@ $T_A = +25^\circ\text{C}$, unless otherwise specified.)

Characteristic	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1000	V
Maximum DC Blocking Voltage	V_{DC}	1000	V
Average Rectified Output Current @ $T_C = +95^\circ\text{C}$	$I_{F(AV)}$	With Heatsink	15
		Without Heatsink	4.1
Peak Forward Surge Current 8.3ms Single Half Sine Wave Superimposed On Rated Load	I_{FSM}	$T_A = +25^\circ\text{C}$	400
		$T_A = +125^\circ\text{C}$	320
Peak Forward Surge Current 1ms Single Half Sine Wave Superimposed On Rated Load	I_{FSM}	$T_A = +25^\circ\text{C}$	800
		$T_A = +125^\circ\text{C}$	640
I^2t Rating For Fusing ($t = 8.3\text{ms}$)	I^2t	664	A^2s
Operating And Storage Temperature Range	T_J, T_{STG}	-55 to +150	$^\circ\text{C}$

Electrical Characteristics

Characteristic	Test Conditions	Symbol	Typ	Max	Unit
Forward Voltage (Note 5)	$I_F = 7.5\text{A}$ $T_A = +25^\circ\text{C}$ $T_A = +125^\circ\text{C}$	V_F	0.88 0.75	0.92 —	V
Leakage Current	$V_R = 1000\text{V}$ $T_A = +25^\circ\text{C}$ $T_A = +125^\circ\text{C}$	I_R	0.08 16	5 500	μA
Typical Junction Capacitance (Note 6)		C_J	137		pF

Thermal Characteristics

Characteristic	Symbol	Typ	Unit
Typical Thermal Resistance (Note 7)	$R_{\theta JC}$	2	$^\circ\text{C/W}$
	$R_{\theta JL}$	2	
	$R_{\theta JA}$	5	

- Notes:
5. Perform static test after the temperature of oven is steady 20 minutes.
 6. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
 7. Thermal resistance junction to case, lead and ambient in accordance with JESD-51. Unit mounted on 195mm*110mm*10mm steel plate.

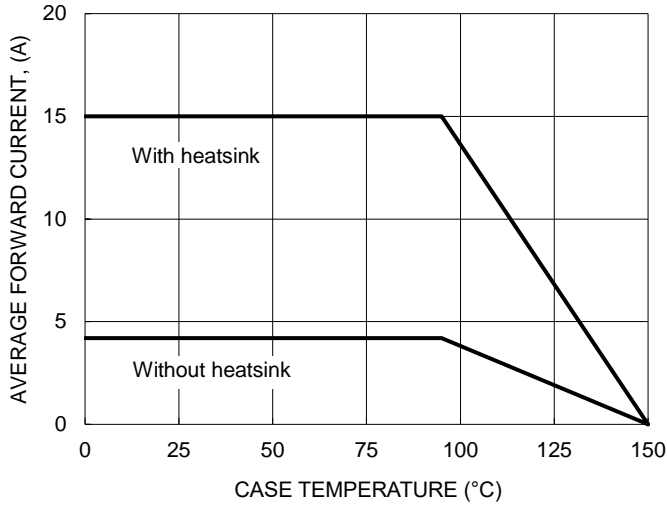


Figure 1. Forward Current Derating Curve

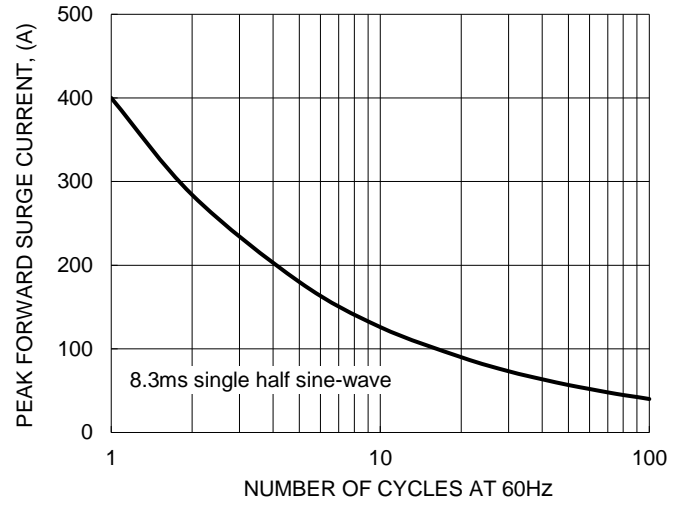


Figure 2. Maximum Non-Repetitive Surge Current

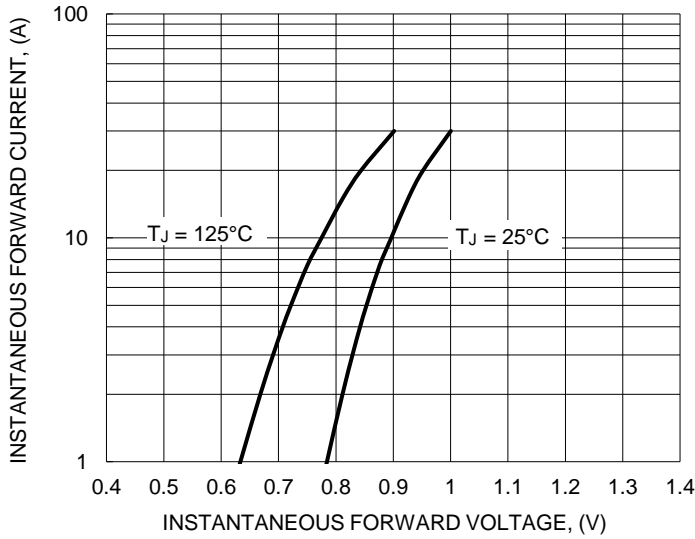


Figure 3. Typical Forward Characteristics

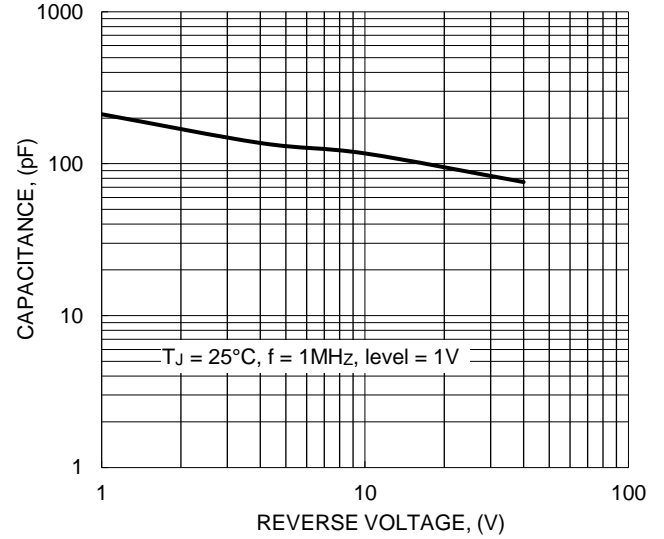


Figure 4. Typical Junction Capacitance

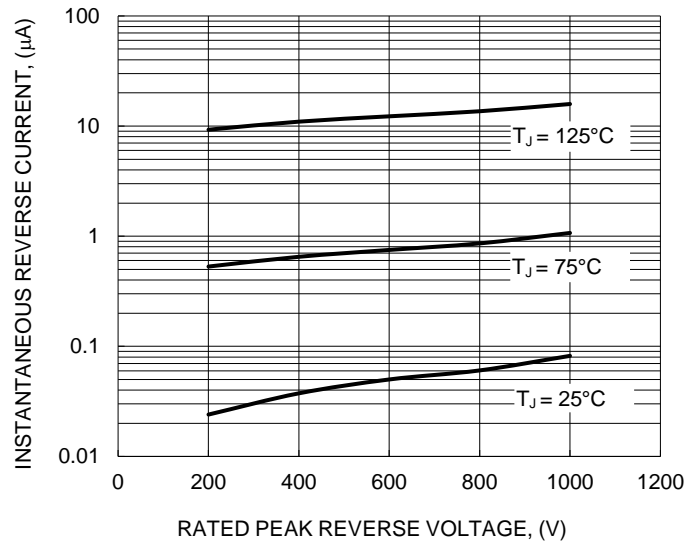
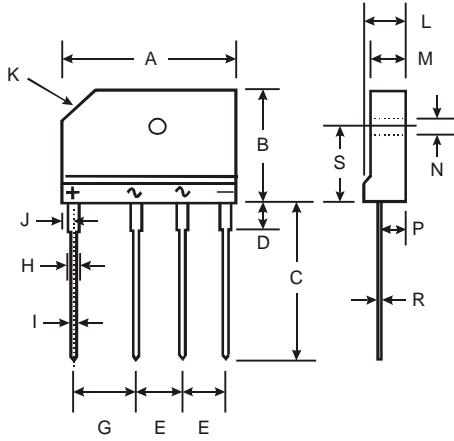


Figure 5. Typical Reverse Characteristics

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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