

Product Summary

V_{RRM} (V)	I_F (A)	V_F Max (V) @ $I_F = 17.5A$	I_R Max (μA)
800	35	0.95	5

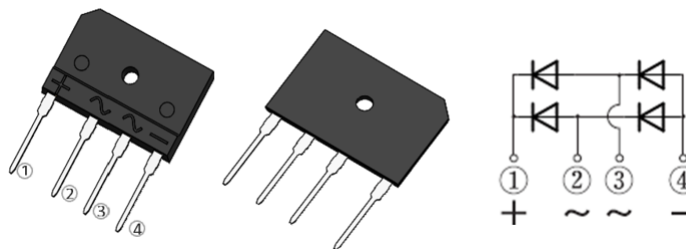
Mechanical Data

- 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: 6.6 grams (Approximate)

Features

- Glass Passivated Die Construction
 - Low-Forward Voltage Drop
 - Ideal for Printed Circuit Board
 - High Surge Current Capability
 - UL Recognized File #E95060
 - 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-Q100/101/104/200, PPAP capable, and manufactured in IATF 16949 certified facilities), please [contact us](https://www.diodes.com/quality/product-definitions/) or your local Diodes representative.**
- <https://www.diodes.com/quality/product-definitions/>

GBJ

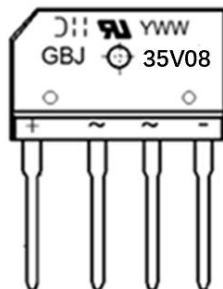


Ordering Information (Note 4)

Orderable Part Number	Package	Packing	
		Qty.	Carrier
GBJ35V08	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



GBJ35V08 = Product Type Marking Code
 J = Manufacturer's Code Marking
 YWW = Date Code Marking
 Y = Last Digit of Year (ex: 5 = 2025)
 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}	800	V
Maximum DC Blocking Voltage	V_{DC}	800	V
Average Rectified Output Current	$I_{F(AV)}$	35 4.3	A
Peak Forward Surge Current 8.3ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	600 480	A
Peak Forward Surge Current 1.0ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	1000 960	A
I^2t Rating for Fusing ($t = 8.3\text{ms}$)	I^2t	1494	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	$I_F = 17.5\text{A}$ $T_A = +25^{\circ}\text{C}$	V_F	0.92	0.95	V
	$I_F = 17.5\text{A}$ $T_A = +125^{\circ}\text{C}$		0.82	—	
Leakage Current	$V_R = 800\text{V}$ $T_A = +25^{\circ}\text{C}$ $T_A = +125^{\circ}\text{C}$	I_R	— 30	5 —	μA
Typical Junction Capacitance (Note 5)		C_J	200	—	pF

Thermal Characteristics

Characteristic	Symbol	Typ	Unit
Typical Thermal Resistance (Note 6)	$R_{\theta JC}$	0.5	$^{\circ}\text{C/W}$
	$R_{\theta JL}$	1.5	
	$R_{\theta JA}$	2.0	
Typical Thermal Resistance (Without Heatsink)	$R_{\theta JC}$	3.5	$^{\circ}\text{C/W}$
	$R_{\theta JL}$	8.0	
	$R_{\theta JA}$	24.0	

Notes: 5. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
6. Thermal resistance junction to case, lead and ambient in accordance with JESD-51. Device mounted on heatsink. Heatsink size is 195mm × 110mm × 10mm al pad.

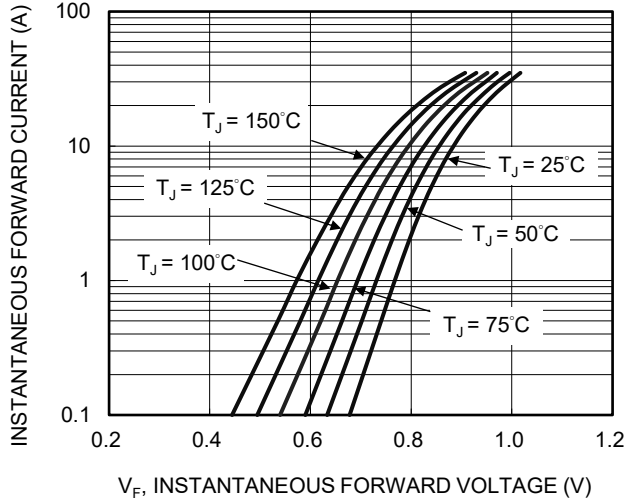


Figure 1. Typical Forward Characteristics

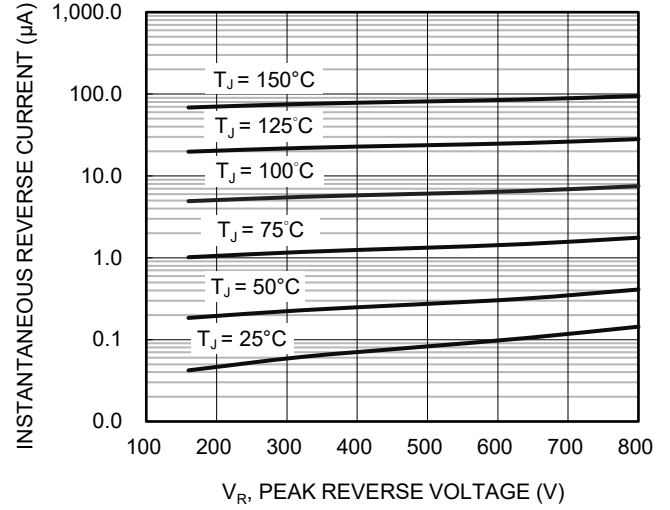


Figure 2. Typical Reverse Characteristics

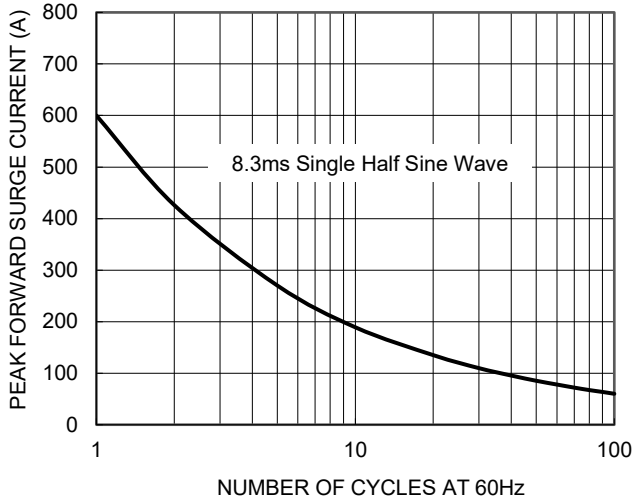


Figure 3. Maximum Non-Repetitive Surge Current

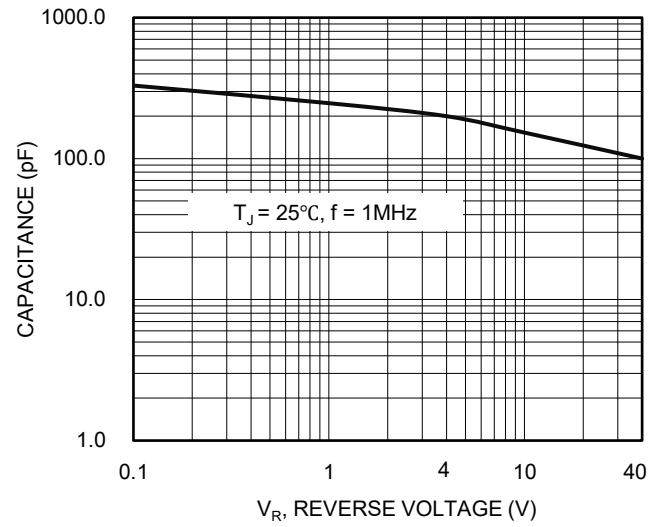


Figure 4. Typical Junction Capacitance

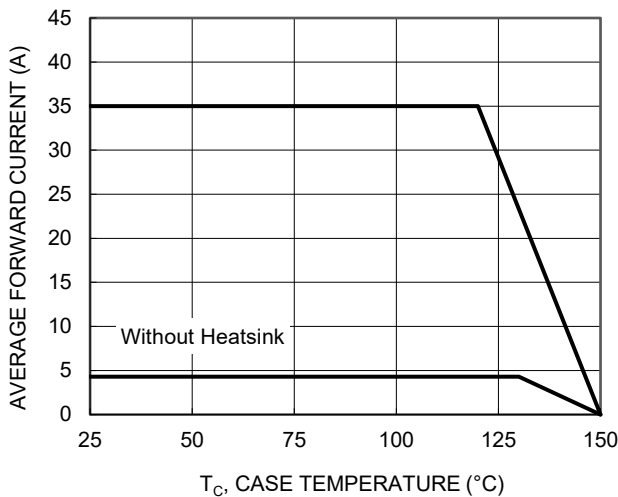
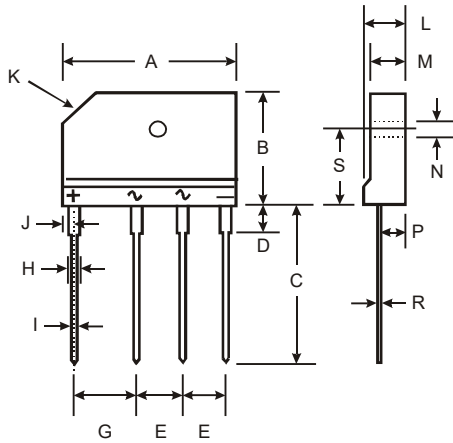


Figure 5. Forward Current Derating Curve

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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