
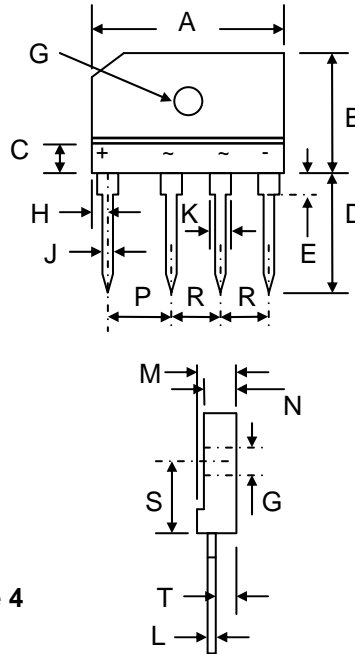


### Features

- Glass Passivated Die Construction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards
-  Recognized File # E157705



GBJ-6		
Dim	Min	Max
A	29.7	30.3
B	19.7	20.3
C	4.8	5.8
D	17.0	18.0
E	3.6	4.2
G	3.1Ø	3.4Ø
H	2.3	2.7
J	0.9	1.1
K	2.0	2.4
L	0.6	0.8
M	4.4	4.8
N	3.4	3.8
P	9.8	10.2
R	7.3	7.7
S	10.8	11.2
T	2.5	2.9
All Dimensions in mm		

### Mechanical Data

- Case: GBJ-6, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 7.0 grams (approx.)
- Mounting Position: Any
- Mounting Torque: 0.8 N.m Max.
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4**

### Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

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

Characteristic	Symbol	GBJ 35A	GBJ 35B	GBJ 35D	GBJ 35G	GBJ 35J	GBJ 35K	GBJ 35M	GBJ 35Q	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$									
Working Peak Reverse Voltage	$V_{RWM}$	50	100	200	400	600	800	1000	1200	V
DC Blocking Voltage	$V_R$									
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	840	V
Average Rectified Output Current @ $T_C = 100^\circ\text{C}$ (Note 1)	$I_o$	35								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	350								A
Forward Voltage per leg @ $I_F = 17.5\text{A}$	$V_{FM}$	1.1								V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$	$I_{RM}$	10 500								$\mu\text{A}$
$I^2t$ Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	510								$\text{A}^2\text{s}$
Typical Junction Capacitance (Note 2)	$C_J$	125								pF
Thermal Resistance Junction to Ambient (Note 3)	$R_{JA}$	22								$^\circ\text{C/W}$
Thermal Resistance Junction to Case (Note 1)	$R_{JC}$	0.8								
RMS Isolation Voltage Terminals to Case, $t = 1\text{min}$	$V_{ISO}$	2500								V
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150								$^\circ\text{C}$

Note: 1. Mounted on 300 x 300 x 1.6mm thick Al. heatsink.  
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.  
 3. Mounted on PCB with 12 x 12mm copper pads and measured at lead length 9.5mm from case.

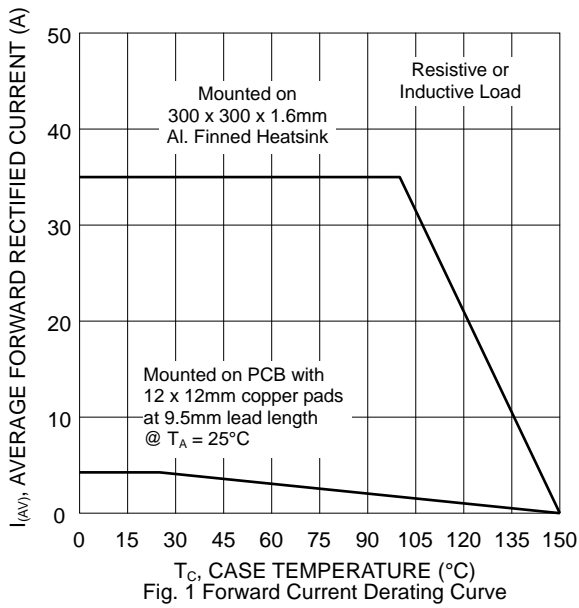


Fig. 1 Forward Current Derating Curve

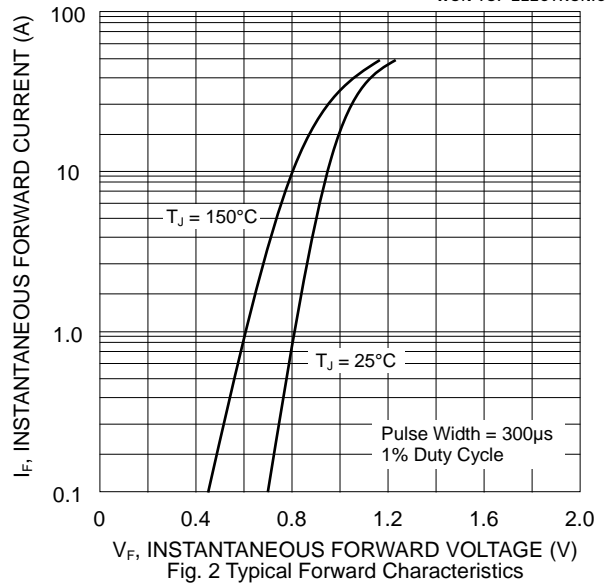


Fig. 2 Typical Forward Characteristics

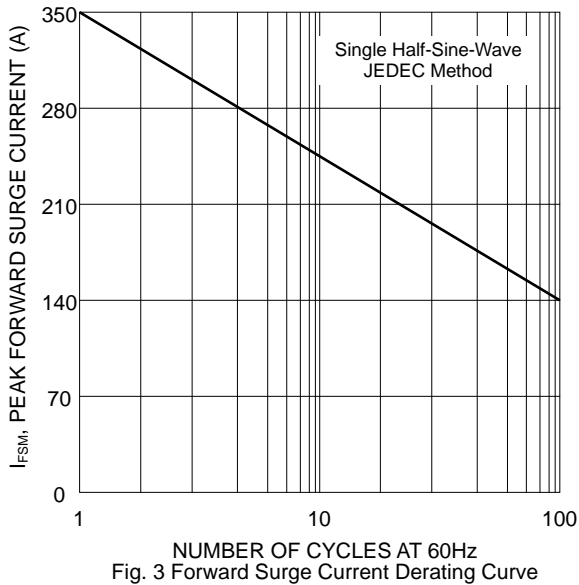


Fig. 3 Forward Surge Current Derating Curve

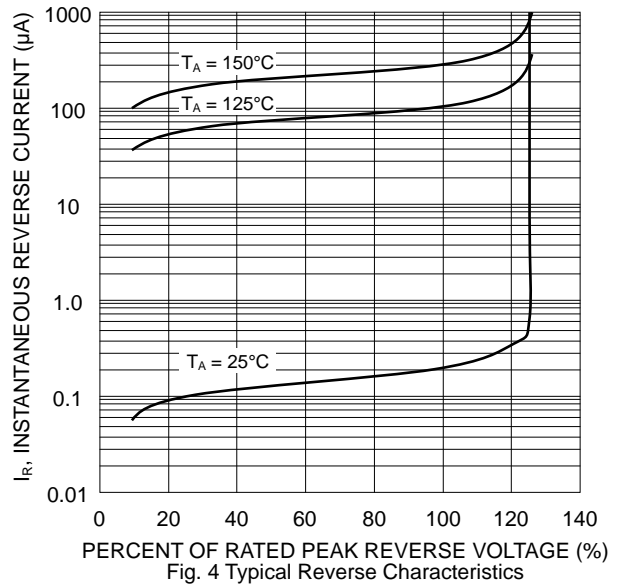


Fig. 4 Typical Reverse Characteristics

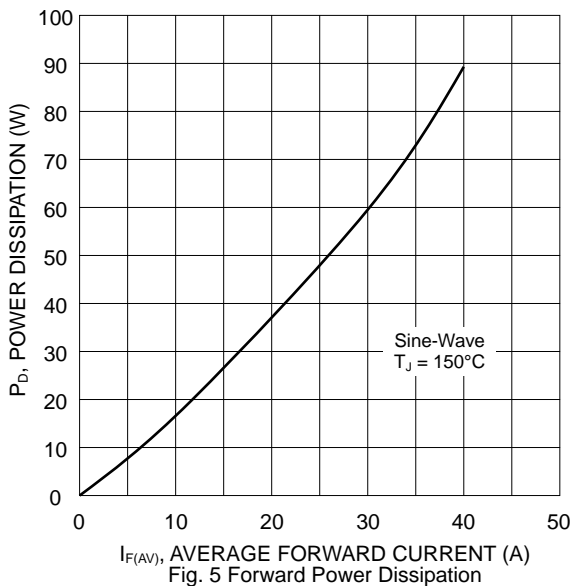


Fig. 5 Forward Power Dissipation

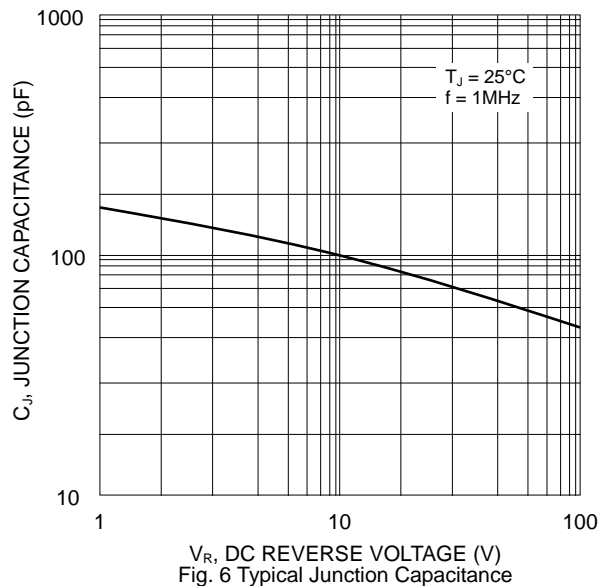
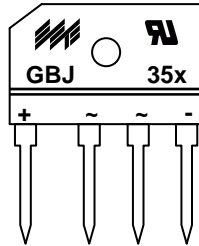


Fig. 6 Typical Junction Capacitance

## MARKING INFORMATION



GBJ35x = Device Number  
 x = A, B, D, G, J, K, M or Q  
 Polarity = As Marked on Body

## PACKAGING INFORMATION

### BULK

Tube Size L x W x H (mm)	Quantity (PCS)	Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
475 x 40 x 7	15	490 x 145 x 135	750	510 x 305 x 160	1,500	16.0

**Note:** 1. Anti-static tube, water clear color.

## ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
GBJ35A	SIL Bridge	15 Units/Tube
GBJ35B	SIL Bridge	15 Units/Tube
GBJ35D	SIL Bridge	15 Units/Tube
GBJ35G	SIL Bridge	15 Units/Tube
GBJ35J	SIL Bridge	15 Units/Tube
GBJ35K	SIL Bridge	15 Units/Tube
GBJ35M	SIL Bridge	15 Units/Tube
GBJ35Q	SIL Bridge	15 Units/Tube

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order RoHS / Lead Free version (with Lead Free finish), add “-LF” suffix to part number above. For example, GBJ35A-LF.**

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**WARNING:** DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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