



GBJ6A – GBJ6M



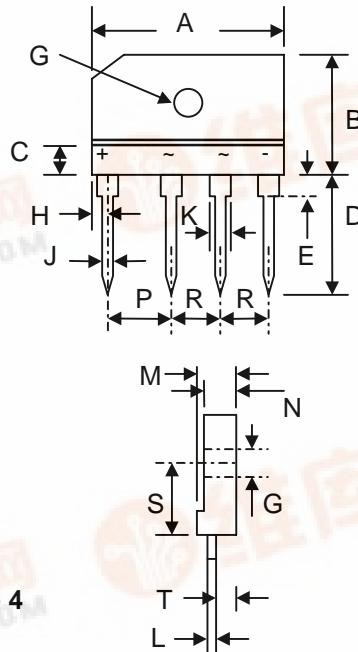
6.0A GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

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

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: 10 cm-kg (8.8 in-lbs) Max.
- **Lead Free: For RoHS / Lead Free Version, Add “-LF” Suffix to Part Number, See Page 4**



GBJ-6		
Dim	Min	Max
A	29.7	30.3
B	19.7	20.3
C	—	5.0
D	17.0	18.0
E	3.8	4.2
G	3.1Ø	3.4Ø
H	2.3	2.7
J	0.9	1.1
K	1.8	2.2
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	2.3	2.7

All Dimensions in mm

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

Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristic	Symbol	GBJ6A	GBJ6B	GBJ6D	GBJ6G	GBJ6J	GBJ6K	GBJ6M	Unit
Peak Repetitive Reverse Voltage	V_{RRM}								
Working Peak Reverse Voltage	V_{RWM}	50	100	200	400	600	800	1000	V
DC Blocking Voltage	V_R								
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current $\text{@ } T_C = 110^\circ\text{C}$ (Note 1)	I_O								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}								A
Forward Voltage per diode $\text{@ } I_F = 3.0\text{A}$	V_{FM}								V
Peak Reverse Current $\text{@ } T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage $\text{@ } T_A = 125^\circ\text{C}$	I_R								μA
Typical Thermal Resistance per leg (Note 2)	$R_{\theta JA}$								$^\circ\text{C/W}$
Typical Thermal Resistance per leg (Note 1)	$R_{\theta JC}$								$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{STG}								$^\circ\text{C}$

Note: 1. Device mounted on 75 x 75 x 1.6mm thick Al plate heatsink.

2. Device mounted on P.C.B. without heatsink.

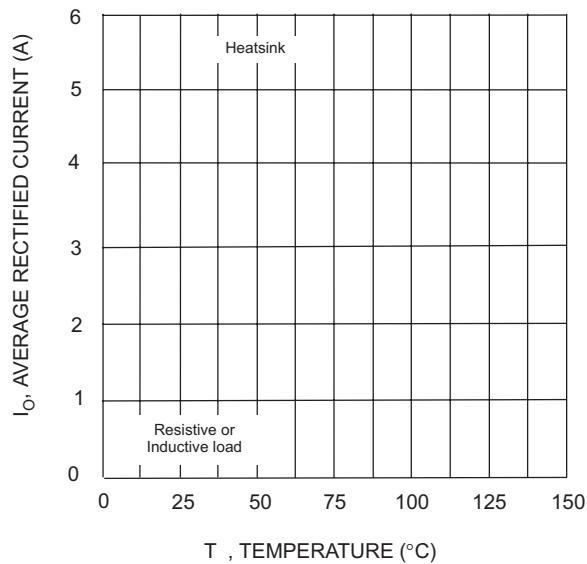


Fig. 1 Forward Current Derating Curve

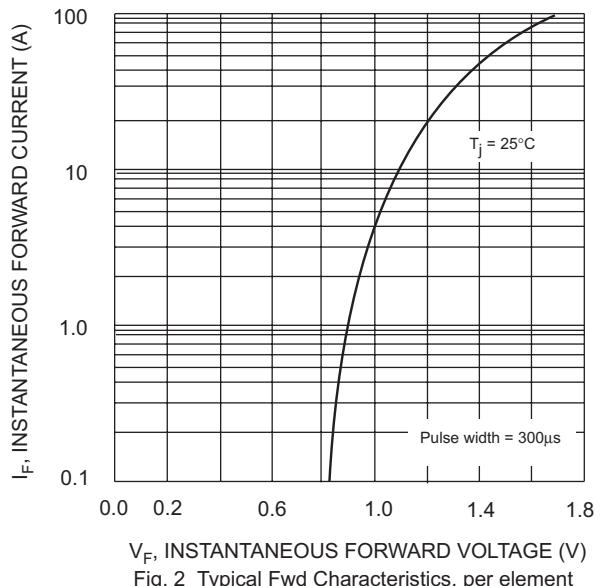


Fig. 2 Typical Fwd Characteristics, per element

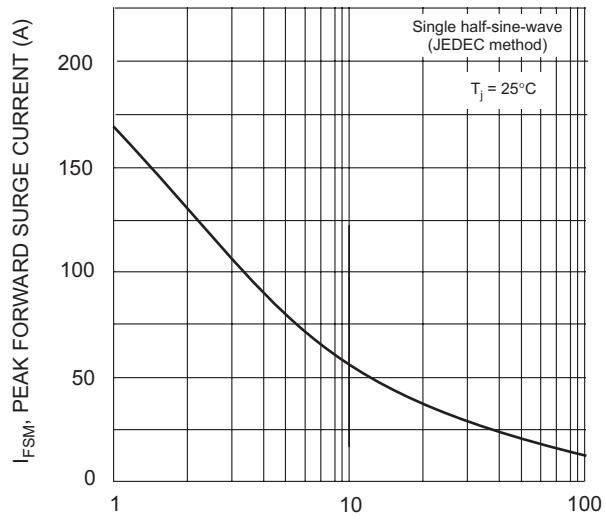


Fig. 3 Maximum Non-Repetitive Surge Current

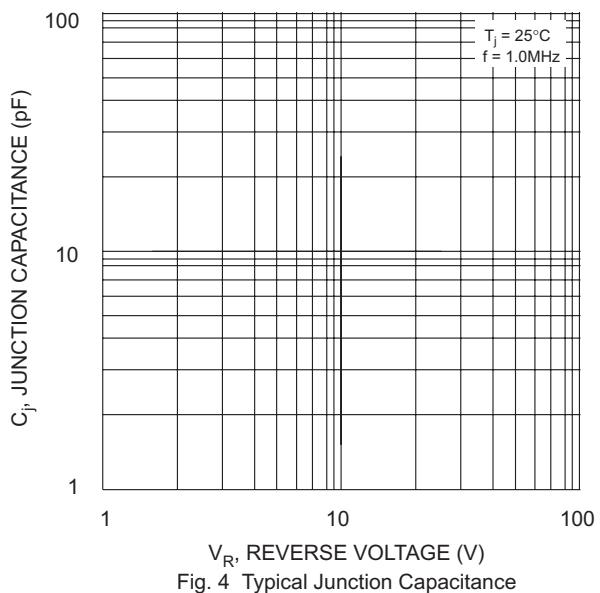
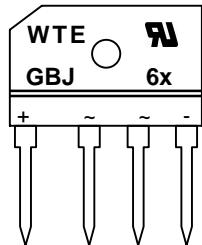


Fig. 4 Typical Junction Capacitance

MARKING INFORMATION



WTE = Manufacturer's Logo
GBJ6x = Device Number
x = A, B, D, G, J, K or M
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
GBJ6A	SIL Bridge	15 Units/Tube
GBJ6B	SIL Bridge	15 Units/Tube
GBJ6D	SIL Bridge	15 Units/Tube
GBJ6G	SIL Bridge	15 Units/Tube
GBJ6J	SIL Bridge	15 Units/Tube
GBJ6K	SIL Bridge	15 Units/Tube
GBJ6M	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 Lead Free version (with Lead Free finish), add “-LF” suffix to part number above. For example, GBJ6A-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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