

Glass Passivated Single Phase Bridge Rectifiers

Reverse Voltage 200 to 1000V
Forward Current 25.Amp

Features

- Glass passivated die construction
- Ideal for printed circuit boards
- Plastic material used carries UL flammability recognition 94V-0
- High surge current capability
- High temperature soldering guaranteed: 265°C /10 seconds, 0.375" (9.5mm) lead length, 5lbs. (2.3kg) tension

Mechanical Data

Case: Molded plastic case

Terminals: Plated leads solderable per MIL-STD-750, Method 2026

Polarity: Marked on Body

Mounting Position: Any

Module Type

TYPE	V _{RRM}	V _{RSM}
GBJ25D	200V	300V
GBJ25G	400V	500V
GBJ25J	600V	700V
GBJ25K	800V	900V
GBJ25M	1000V	1100V

Maximum Ratings and Thermal Characteristics (TA = 25°C unless otherwise noted)

Symbol	Conditions	Values	Units
I _{F(AV)}	Maximum average forward output rectified current T _c = 100°C	25	A
I _{FSM}	Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method)	350	A
i ² t	Rating for fusing (t < 8.3ms)	500	A ² s
V _{ISOL}	a.c.50HZ;r.m.s.;1min	2500	V
R _{θJA} R _{θJC}	Maximum thermal resistance per leg	22 ⁽¹⁾ 1.0 ⁽²⁾	°C/W
T _{OR}	Mounting Torque (Recommended torque: 0.5 N.m)	0.8	N.m
T _j , T _{STG}	Operating Junction and storage temperature range	-55 to +150	°C
Weight	Approximate Weight	7.0	g

Electrical Characteristics (TA = 25°C unless otherwise noted)

Symbol	Conditions	Values	Units
V _F	Maximum Instantaneous Forward Voltage per leg I _{FM} = 12.5A	1.0	V
I _R	Maximum DC reverse current at rated DC blocking voltage per leg TA = 25°C TA = 125°C	5.0 500	μA

Notes: (1) Junction to ambient without heatsink

(2) Junction to case with heatsink

(3) Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw

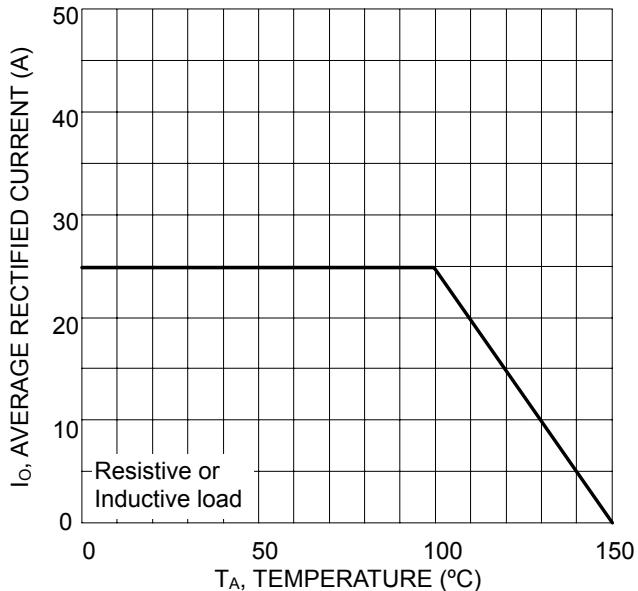
Performance Curves


Fig.1 Forward Current Derating Curve

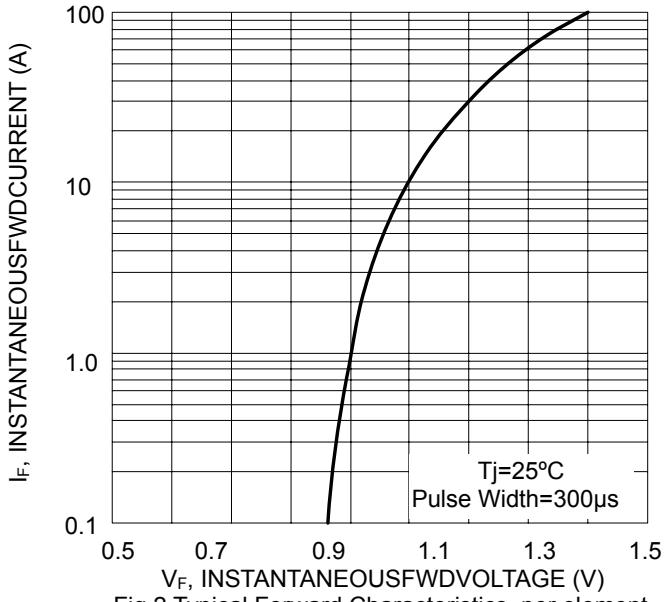


Fig.2 Typical Forward Characteristics, per element

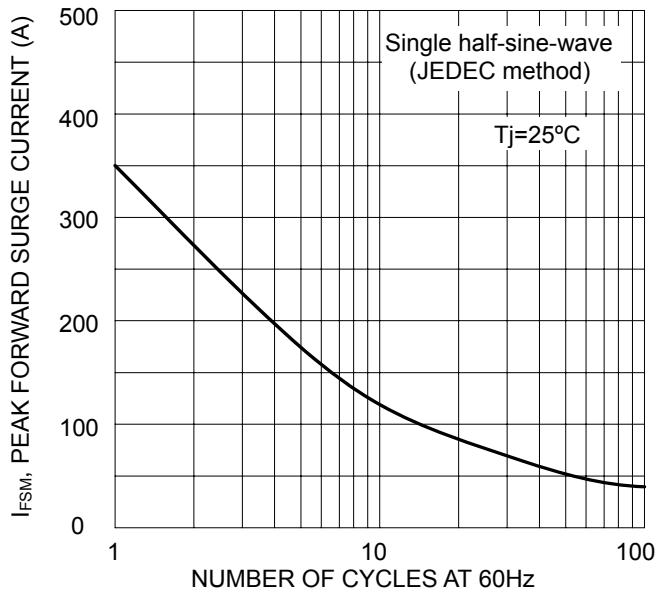


Fig.3 Maximum Non-Repetitive Surge Current

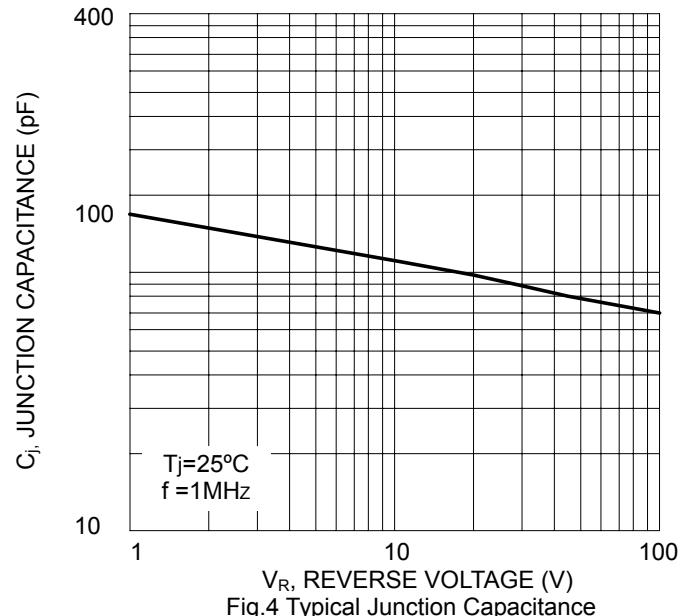


Fig.4 Typical Junction Capacitance

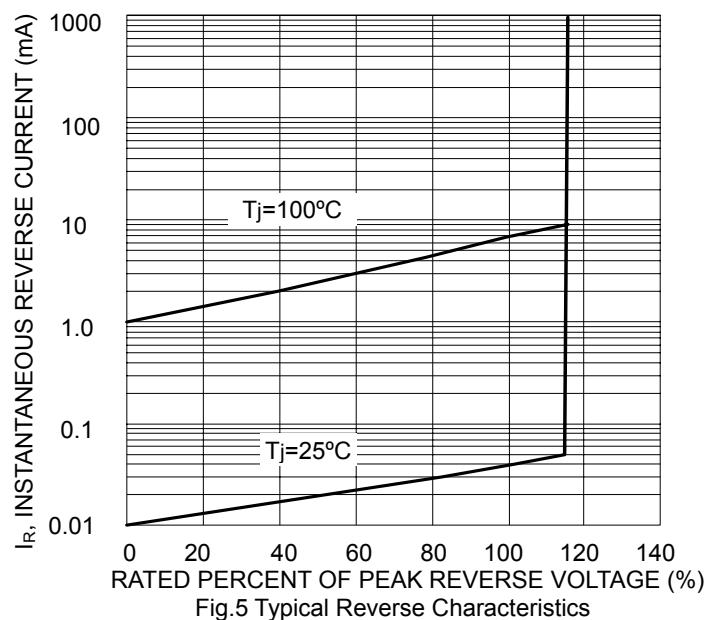
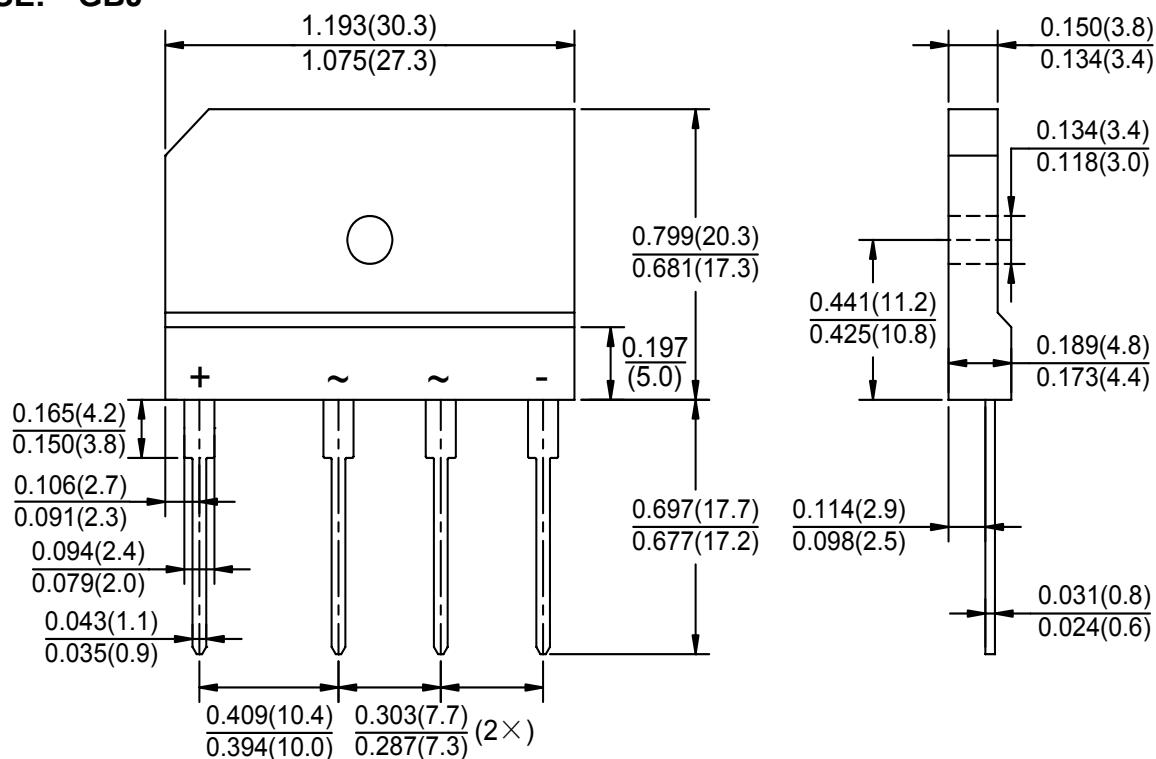


Fig.5 Typical Reverse Characteristics

Package Outline Information
CASE: GBJ

Dimensions in inches (mm)