

Glass Passivated Single Phase Bridge Rectifiers

Reverse Voltage 200 to 1000V
Forward Current 6.0 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	VRRM	VRSRM
SGBJ6D	200V	300V
SGBJ6G	400V	500V
SGBJ6J	600V	700V
SGBJ6K	800V	900V
SGBJ6M	1000V	1100V

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

Symbol	Conditions	Values	Units
IF(AV)	Maximum average forward output rectified current Tc =100°C	6.0	A
IFSM	Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method)	150	A
i ² t	Rating for fusing (t<8.3ms)	93	A ² s
Visol	a.c.50HZ;r.m.s.;1min	2500	V
RθJA RθJC	Maximum thermal resistance per leg	22 ⁽¹⁾ 3.4 ⁽²⁾	°C/W
Tj, TSTG	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
VF	Maximum Instantaneous Forward Voltage per leg IFM =3.0A	1.0	V
IR	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

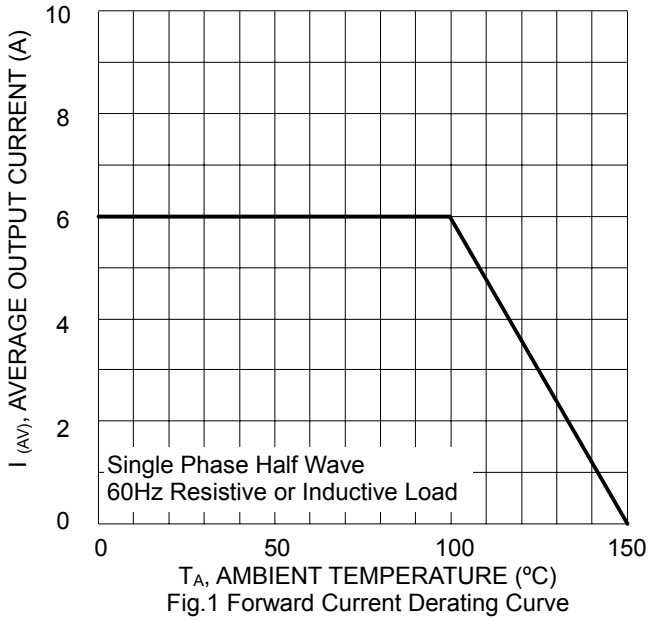


Fig.1 Forward Current Derating Curve

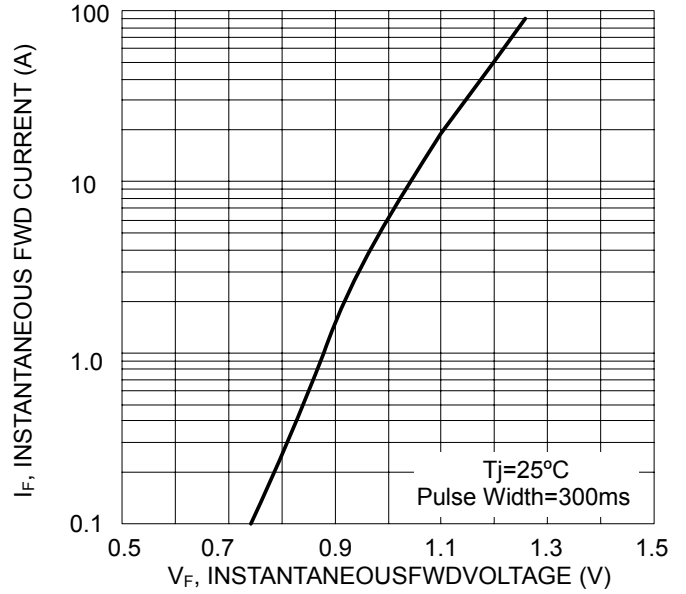


Fig.2 Typical Forward Characteristics, per element

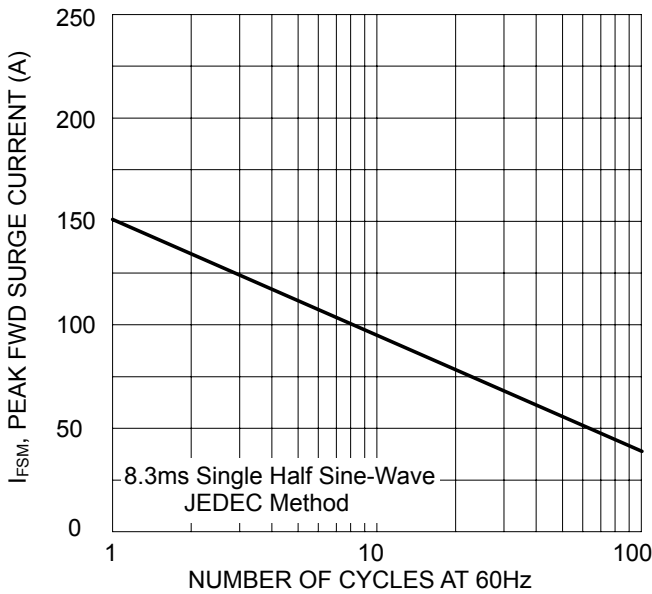


Fig.3 Max Non-Repetitive Peak Fwd Surge Current

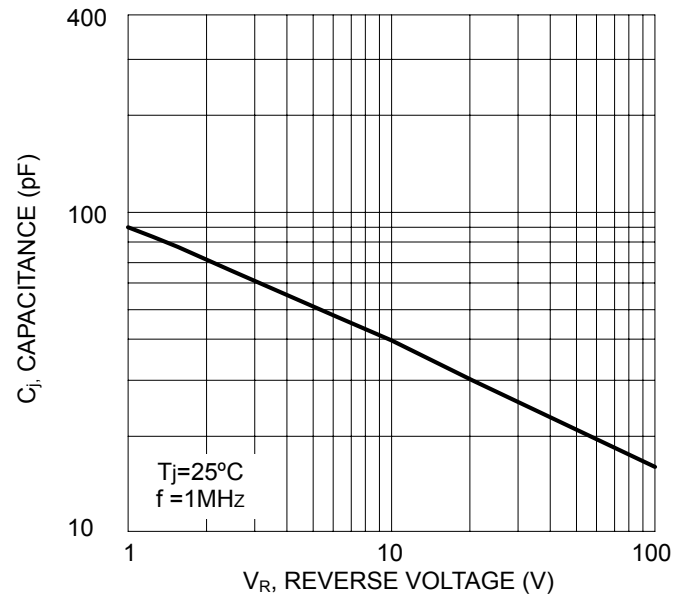


Fig.4 Typical Junction Capacitance per element

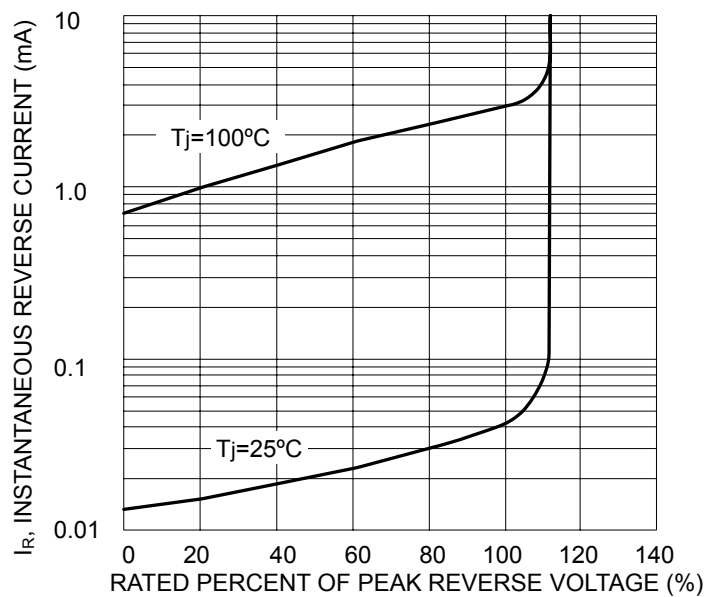
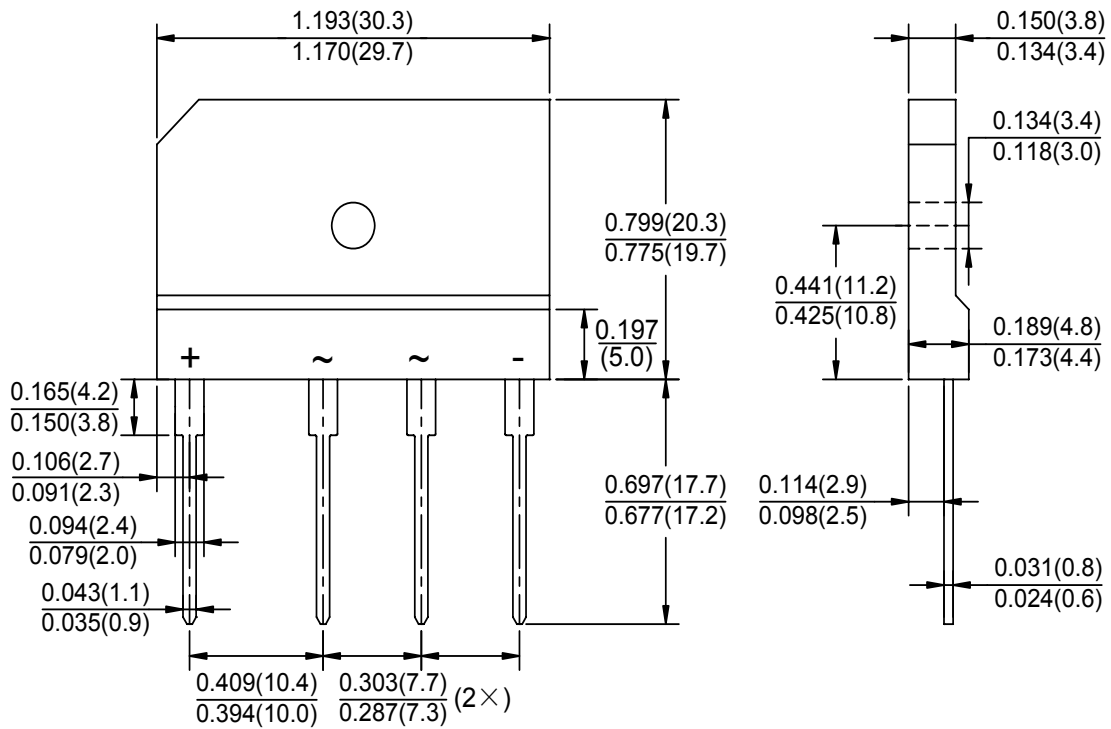


Fig.5 Typical Reverse Characteristics

Package Outline Information

CASE: GBJ



Dimensions in inches (mm)