

## Glass Passivated Single Phase Bridge Rectifiers

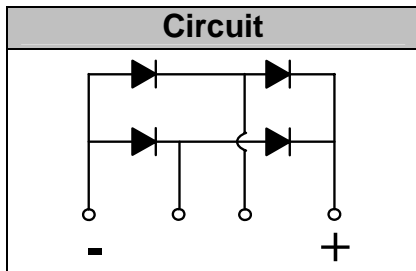
**Reverse Voltage** 200 to 1000V  
**Forward Current** 4.0 Amp

### 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	VRSM
SGBU402	200V	300V
SGBU404	400V	500V
SGBU406	600V	700V
SGBU408	800V	900V
SGBU410	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	4.0 <sup>(1)</sup>	A
IFSM	Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method)	80	A
i <sup>2</sup> t	Rating for fusing (t<8.3ms)	27	A <sup>2</sup> s
Visol	a.c.50HZ;r.m.s.;1min	2500	V
RθJA RθJC	Maximum thermal resistance per leg	22 <sup>(2)</sup> 4.2 <sup>(3)</sup>	°C/W
Tj, TSTG	Operating Junction and storage temperature range	-55 to +150	°C
Weight	Approximate Weight	4.0	g

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

Symbol	Conditions	Values	Units
VF	Maximum Instantaneous Forward Voltage per leg IFM =2.0A	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) Heat sink, Tc mouting-4x4x0.15cm thick copper plate  
 (2) Junction to ambient without heatsink  
 (3) Junction to case with heatsink  
 (4) Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with M3 screw

## Performance Curves

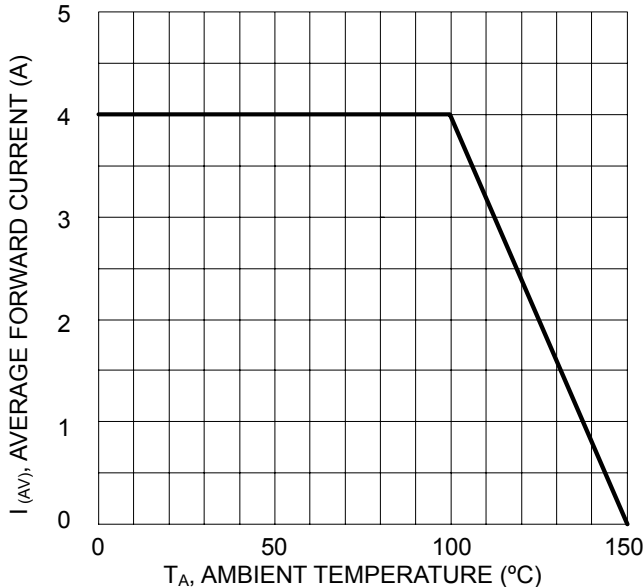


Fig.1 Forward Current Derating Curve

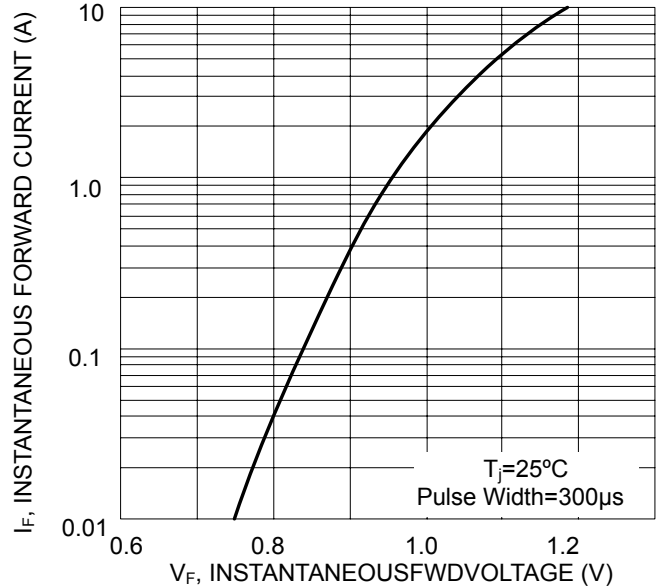


Fig.2 Typical Forward Characteristics, per element

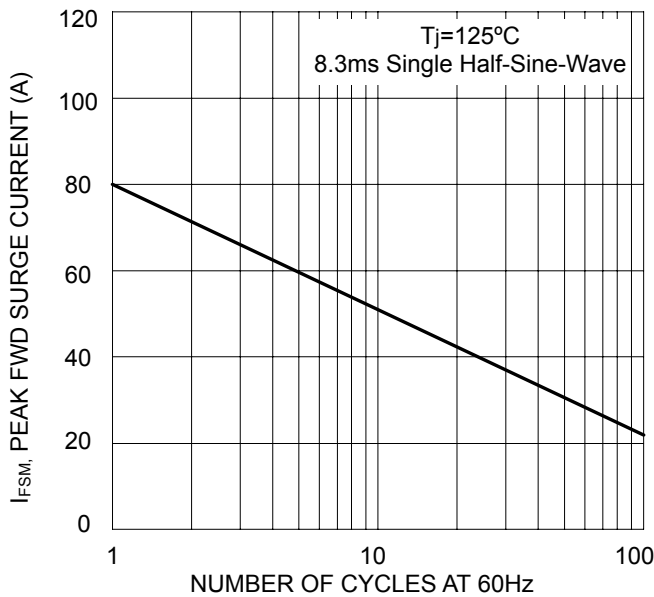


Fig.3 Max Non-Repetitive Forward Surge Current

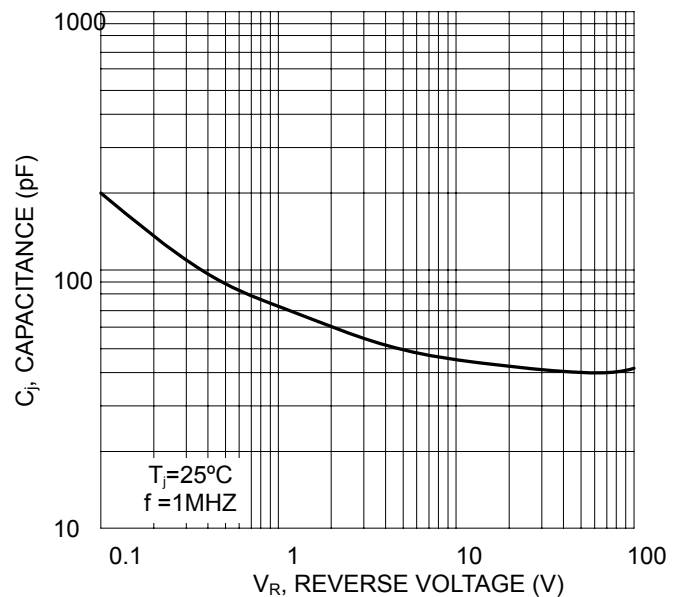


Fig.4 Typ Junction Capacitance per element

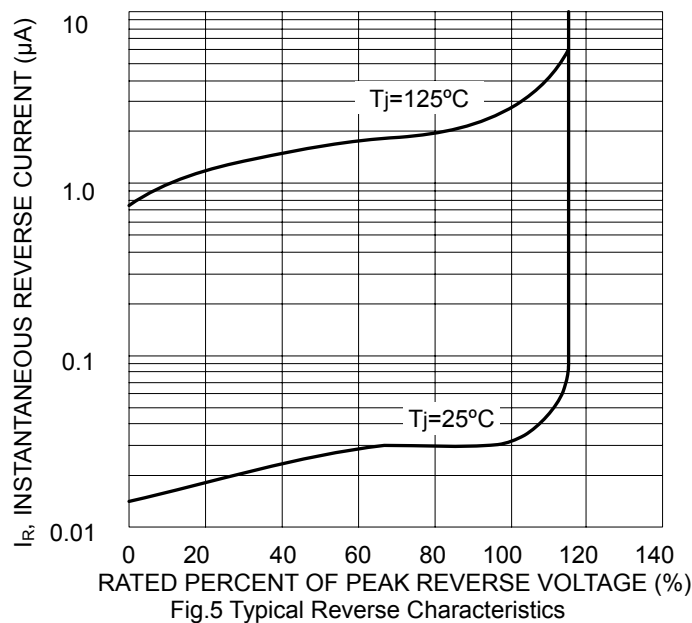


Fig.5 Typical Reverse Characteristics

## Package Outline Information

