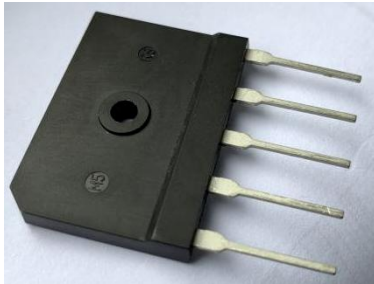


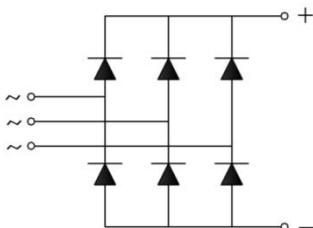


SGBJ3508 THRU SGBJ3516

Glass Passivated Single Phase Bridge Rectifiers



Circuit



V_{RRM} 800 to 1600V

I_D 35 A

Features

- Glass passivated die construction
- Ideal for printed circuit boards
- 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

Bridge Type

TYPE	V_{RRM}	V_{RSM}
SGBJ 3508	800V	900V
SGBJ 3510	1000V	1100V
SGBJ 3512	1200V	1300V
SGBJ 3514	1400V	1500V
SGBJ 3516	1600V	1700V

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

Symbol	Conditions	Values	Units
I_D	average forward output current sine wave ,R-load Tc =100°C	35	A
I_{FSM}	Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method) 50Hz Tj=25°C	400	A
I^2t	Rating for fusing (t=1~10ms)	800	A ² s
V_{ISO}	A.C.50/60Hz;R.M.S.;1min	2500	V
Tj, Tstg	Operating Junction and storage temperature range	-40 to +150	°C
Ms	Mounting Torque (Recommended torque:0.65 N • m)	0.8	N • m
Wt	Approximate Weight	10	g

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

Symbol	Conditions	Values	Units
V_{FM}	Maximum Forward Voltage per leg If =17.5A Tj=25°C	1.18	V
I_{RRM}	Maximum reverse current at rated blocking voltage per leg Tj = 150°C	3	mA
$R_{th(j-c)}$	Maximum thermal resistance per ⁽¹⁾ per diode total	7.8 1.3	°C/W

Notes: (1) Junction to case



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Performance Curves

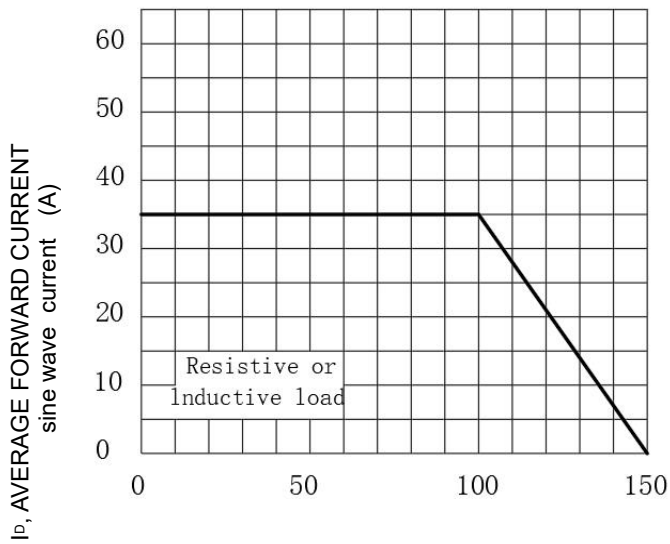


Fig.1 Forward Current Derating Curve

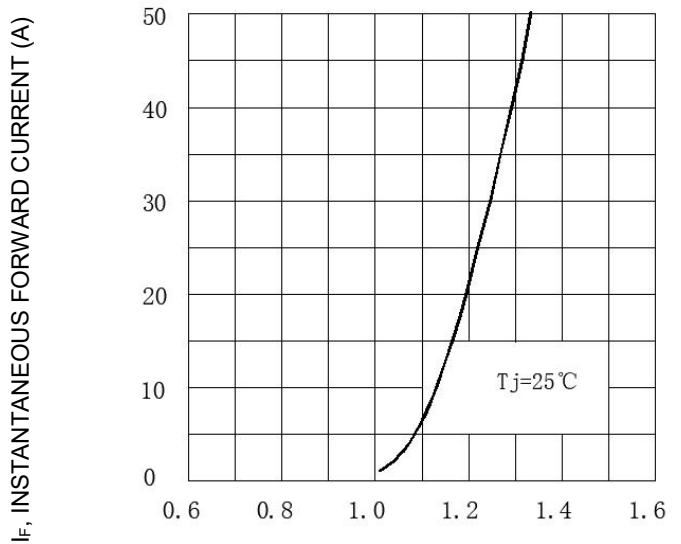


Fig.2 Maximum Forward Characteristics, per element

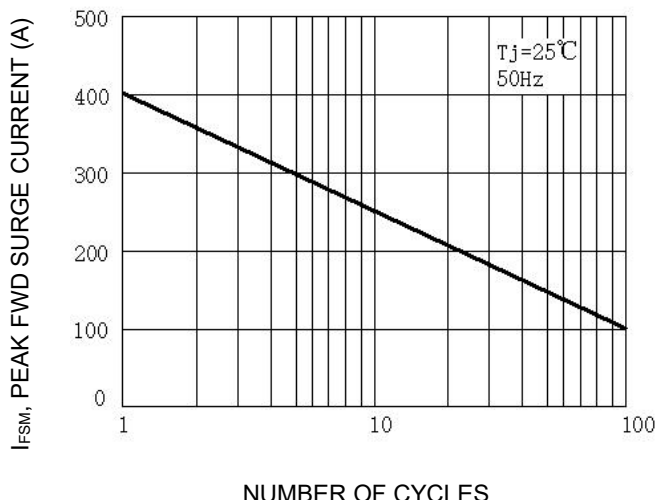


Fig.3 Max Non-Repetitive Surge Current

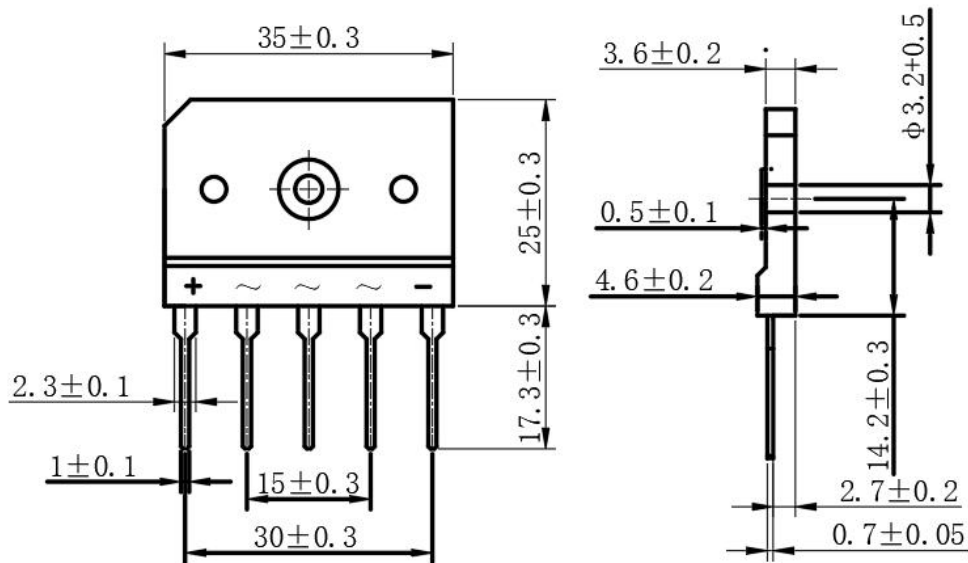


SGBJ3508 THRU SGBJ3516

Glass Passivated Single Phase Bridge Rectifiers

Package Outline Information

CASE: SGBJ



Dimensions in inches (mm)