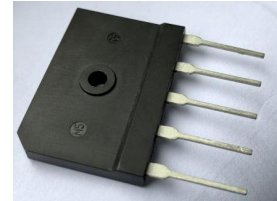


25A Three Phase Bridge Rectifier

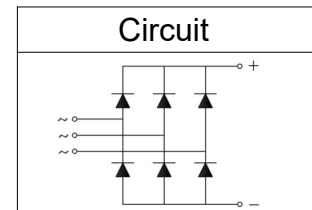
Features

- 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	VRRM	VRSM
SGBJ 2508	800V	900V
SGBJ 2510	1000V	1100V
SGBJ 2512	1200V	1300V
SGBJ 2514	1400V	1500V
SGBJ 2516	1600V	1700V

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

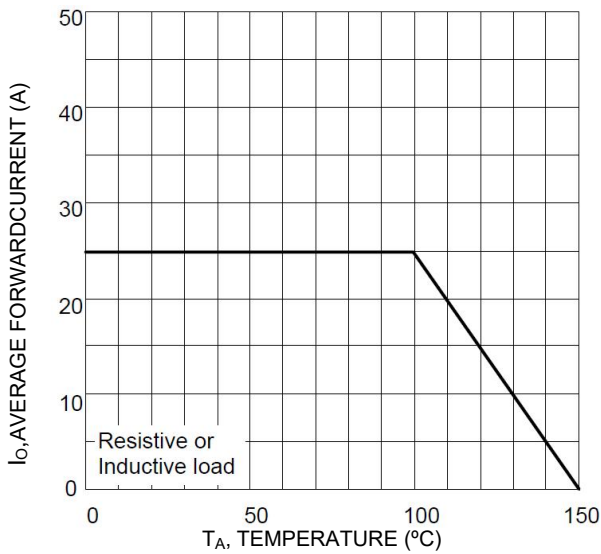
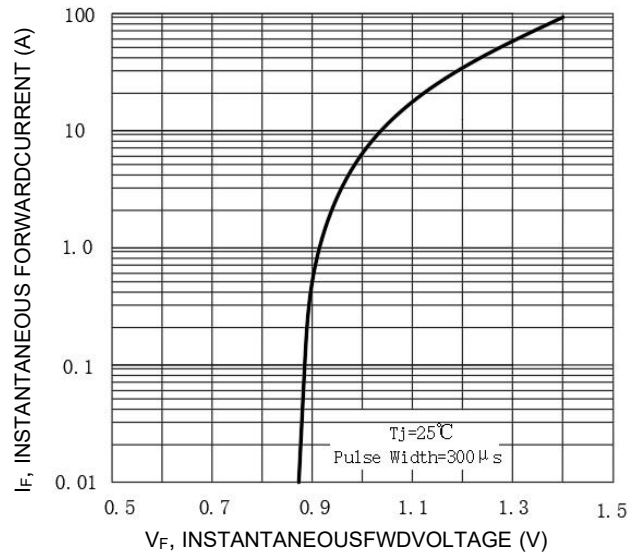
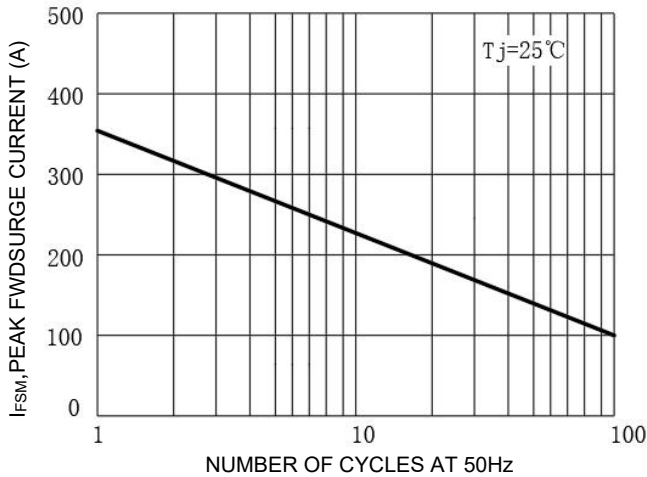
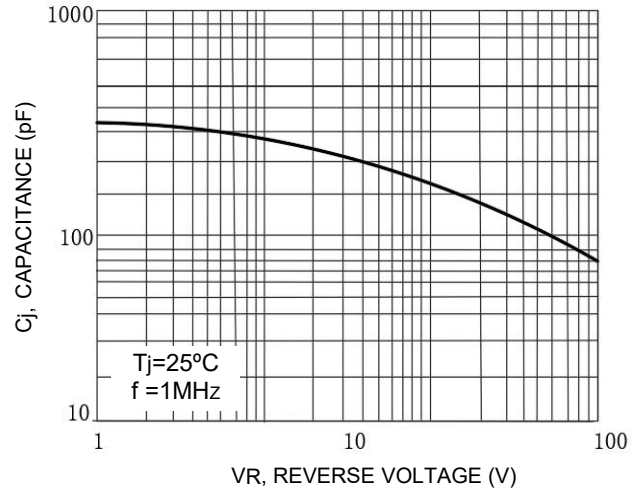
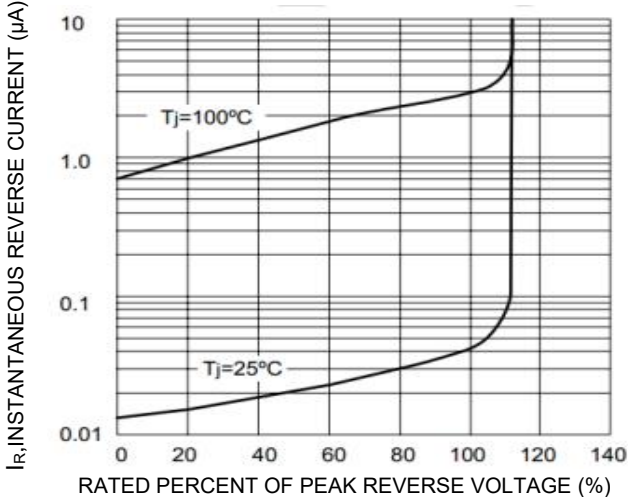
Symbol	Conditions	Values	Units
$I_{(AV)}$	Maximum average forward output rectified current $T_c = 100^\circ\text{C}$	25	A
I_{FSM}	Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method)	350	A
I^2t	Rating for fusing ($t < 10\text{ms}$)	612	A^2s
Visol	a.c.50HZ;r.m.s.;1min	2500	V
$R_{\theta JC}$	Maximum thermal resistance per leg (1)	1.5	$^\circ\text{C}/\text{W}$
TOR	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	$^\circ\text{C}$
Weight	Approximate Weight	10	g

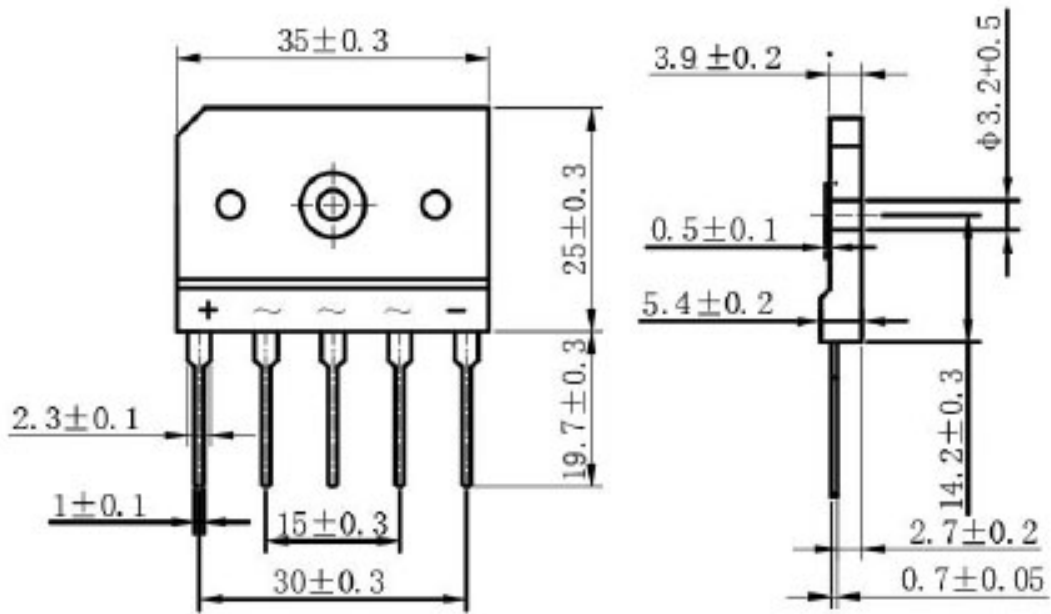
Electrical Characteristics (TA = 25°C unless otherwise noted)

Symbol	Conditions	Values	Units
V_F	Maximum Instantaneous Forward Voltage per leg $I_{FM} = 12.5\text{A}$	1.1	V
I_R	Maximum DC reverse current at rated DC blocking voltage per leg	$T_A = 25^\circ\text{C}$ 5.0 $T_A = 125^\circ\text{C}$ 500	μA

Notes: (1) Junction to case with heatsink

(2) 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 Surge Current

Fig.4 Typical Junction Capacitance per Element

Fig.5 Typical Reverse Characteristics


Package Outline Information
CASE: SGBJ


Dimensions in inches (mm)

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