



SGBJ25 Series

Glass Passivated 3 Phase Bridge Rectifiers

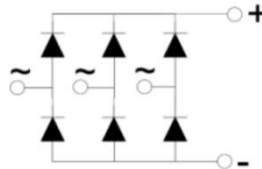
Reverse Voltage - 800 to 1600V Forward Current - 25A

Features

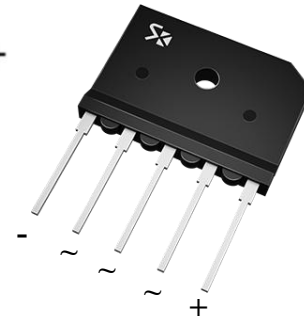
- Low forward voltage drop
- High current capability
- High reliability
- Meet UL flammability classification 94V-0

Applications

- For use in high power supply inverters, servo motor and welding machine applications



SGBJ



RoHS
COMPLIANT

Maximum Ratings and Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate by 20 %)

Parameter		Symbol	SGBJ 2508	SGBJ 2510	SGBJ 2512	SGBJ 2516	Unit
Maximum Repetitive Peak Reverse Voltage		V _{RRM}	800	1000	1200	1600	V
Maximum RMS voltage		V _{RMS}	560	700	840	1120	V
Maximum DC Blocking Voltage		V _{DC}	800	1000	1200	1600	V
Peak Non-Repetitive Reverse Voltage		V _{RSM}	900	1100	1300	1700	V
Maximum Average Forward Rectified Current @T _C =110°C		I _{F(AV)}	25				A
Peak Forward Surge Current,8.3ms Single Half Sine-wave, Superimposed on Rated Load (JEDEC method)		I _{FSM}	350				A
I²t Rating for Fusing(t<8.3mS)		I²t	508				A²S
Peak Forward Voltage per Diode at 12.5A DC		V _F	1.1				V
Maximum DC Reverse Current at Rated DC Blocking Voltage per Diode	T _J =25°C	I _R	5				µA
	T _J =125°C		3				mA
RMS Isolation Voltage from Case to Lead		V _{ISO}	2500				V
Typical Thermal Resistance to Case		R _{θJC}	0.8				°C/W
Operating Junction Temperature Range		T _J	-55~+150				°C
Storage Temperature Range		T _{STG}	-55~+150				°C

Notes: (1). Surface roughness of Heat sink < 0.05mm

(2). The typical data above is for reference only



SGBJ25 Series

Typical Characteristics

Fig. 1 - Forward Current Derating Curve

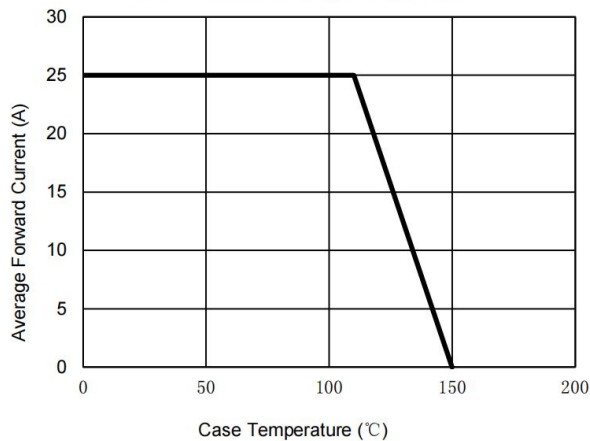


Fig. 2 - Maximum Non-Repetitive Surge Current

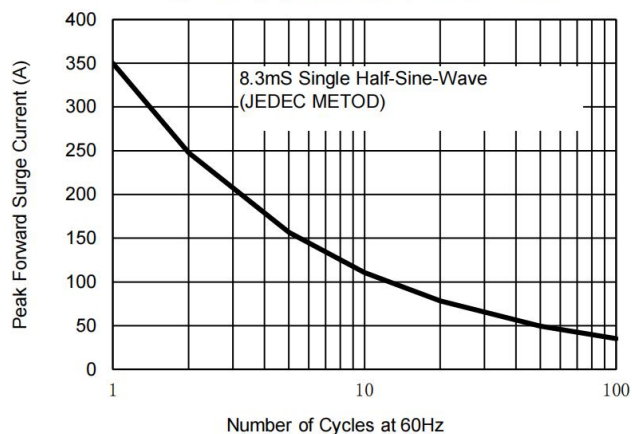


Fig. 3 - Typical Reverse Characteristics

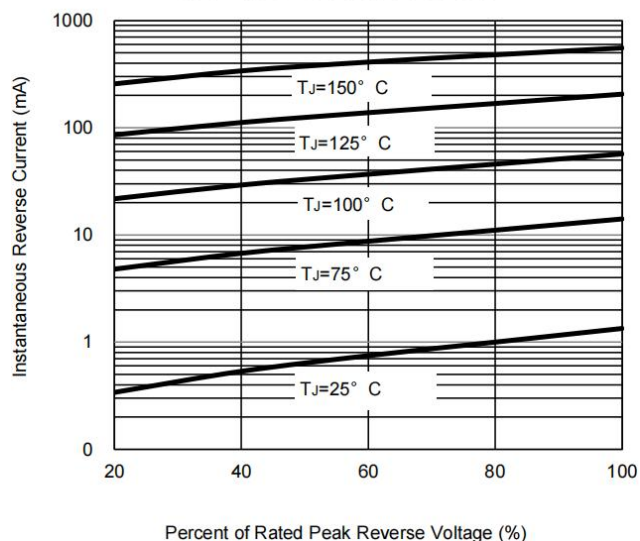
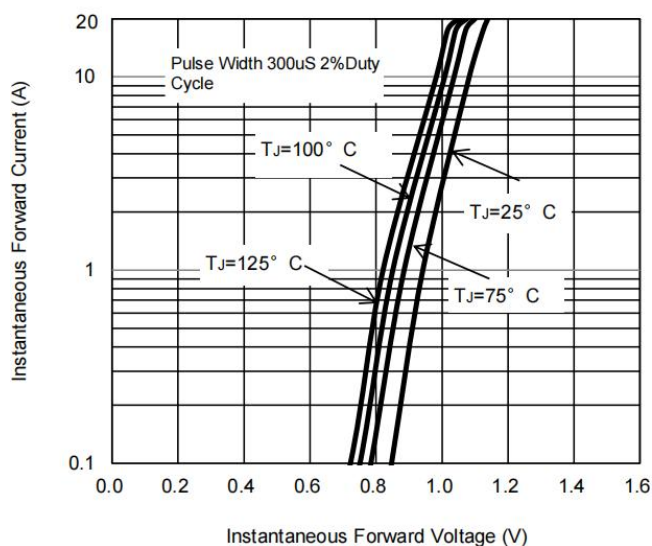


Fig. 4 - Typical Forward Characteristics



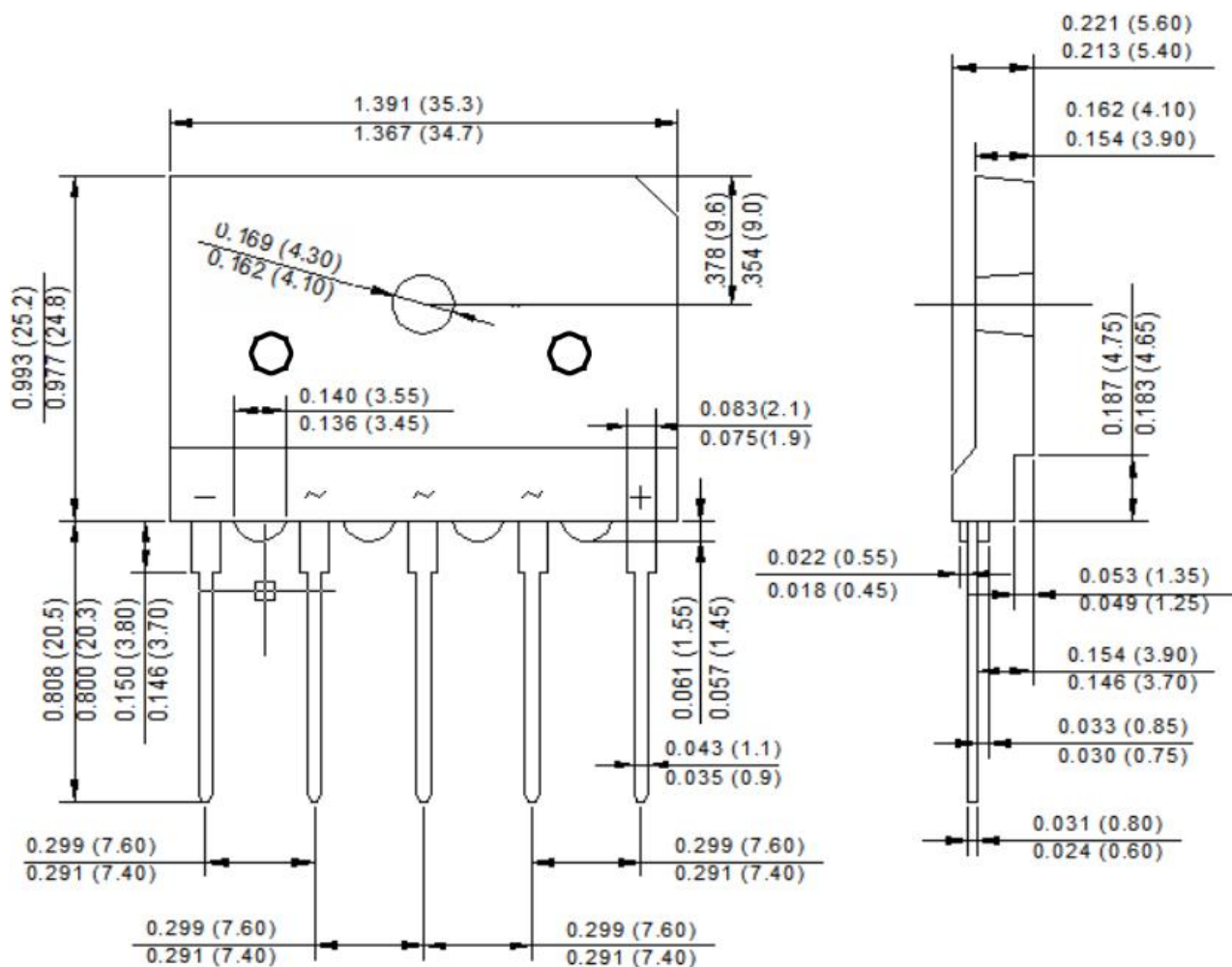


SGBJ25 Series

Package Information

SGBJ

Dimensions in Inches (Millimeters)





Shikues Disclaimer

1.Accuracy of Information and Right to Modify

The information provided in this document is for reference only. Shikues reserves the right to make changes to this document and to the specifications of the products described herein at any time, without prior notice, for the purpose of improving reliability, function, design, or for any other reason. It is the customer's responsibility to obtain and verify the latest product information and specifications before making any final design, procurement, or usage decisions.

2.No Warranty

Shikues makes no express or implied warranties, representations, or guarantees regarding the suitability of its products for any particular purpose.

Shikues assumes no liability for any assistance provided or for the design of customer products. All products are supplied "as is."

3.Intended Use and Limitation of Liability

The products described in this document are intended for use in general-purpose electronic devices. They are neither designed nor tested nor authorized for use in transportation equipment or applications requiring high reliability. Unless expressly authorized in writing by Shikues, these products must not be used as critical components in life-support systems or any applications where failure could directly pose a risk to human life (including, but not limited to, medical devices, transportation systems, aerospace equipment, nuclear facilities, and safety-critical systems).

Shikues assumes no responsibility or liability for any consequences arising from the use of its products in unauthorized or unintended applications.

Neither Shikues nor its representatives shall be held liable for any resulting damages.

4.Intellectual Property

This document does not grant any express or implied license—whether by estoppel, implication, or otherwise—to use any intellectual property rights of Shikues.