



SGBJ25 Series

Glass Passivated 3 Phase Bridge Rectifiers

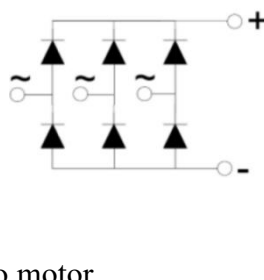
Reverse Voltage - 800 to 1600V Forward Current - 25A

Features

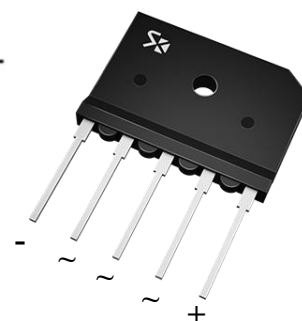
- Low forward voltage drop
- High current capability
- High reliability
- Meet UL flammability classification 94V-0

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



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Typical Characteristics

Fig. 1 - Forward Current Derating Curve

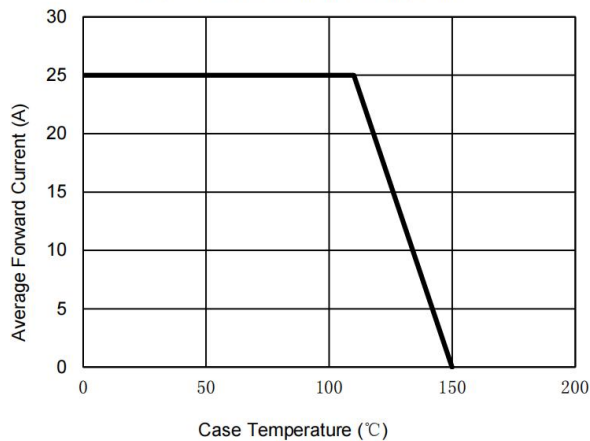


Fig. 2 - Maximum Non-Repetitive Surge Current

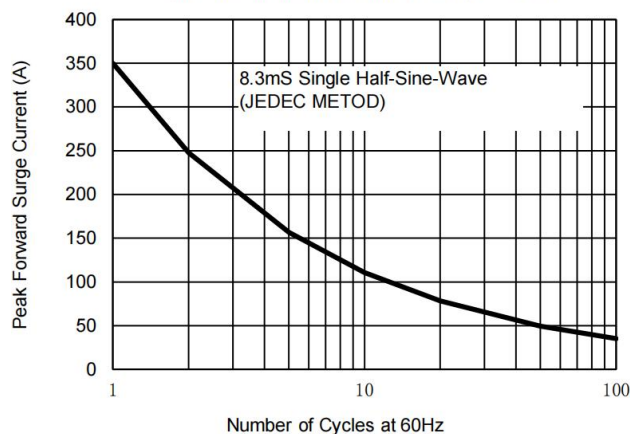


Fig. 3 - Typical Reverse Characteristics

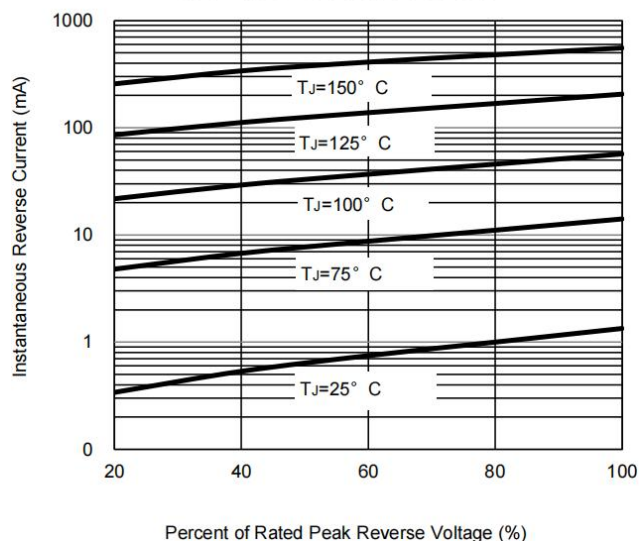
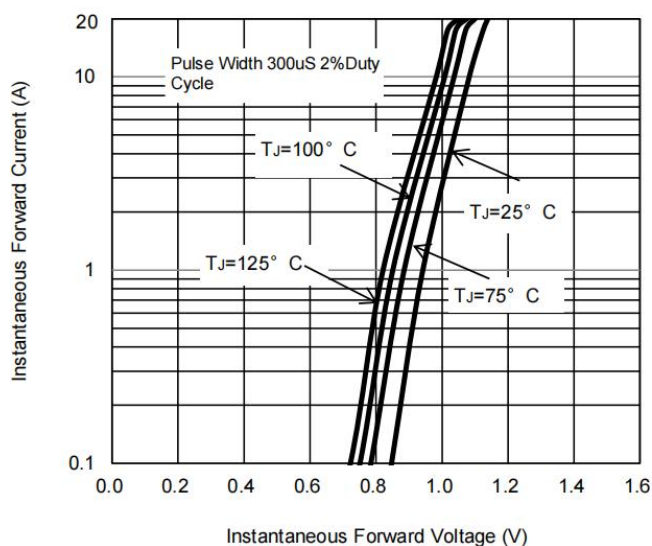


Fig. 4 - Typical Forward Characteristics



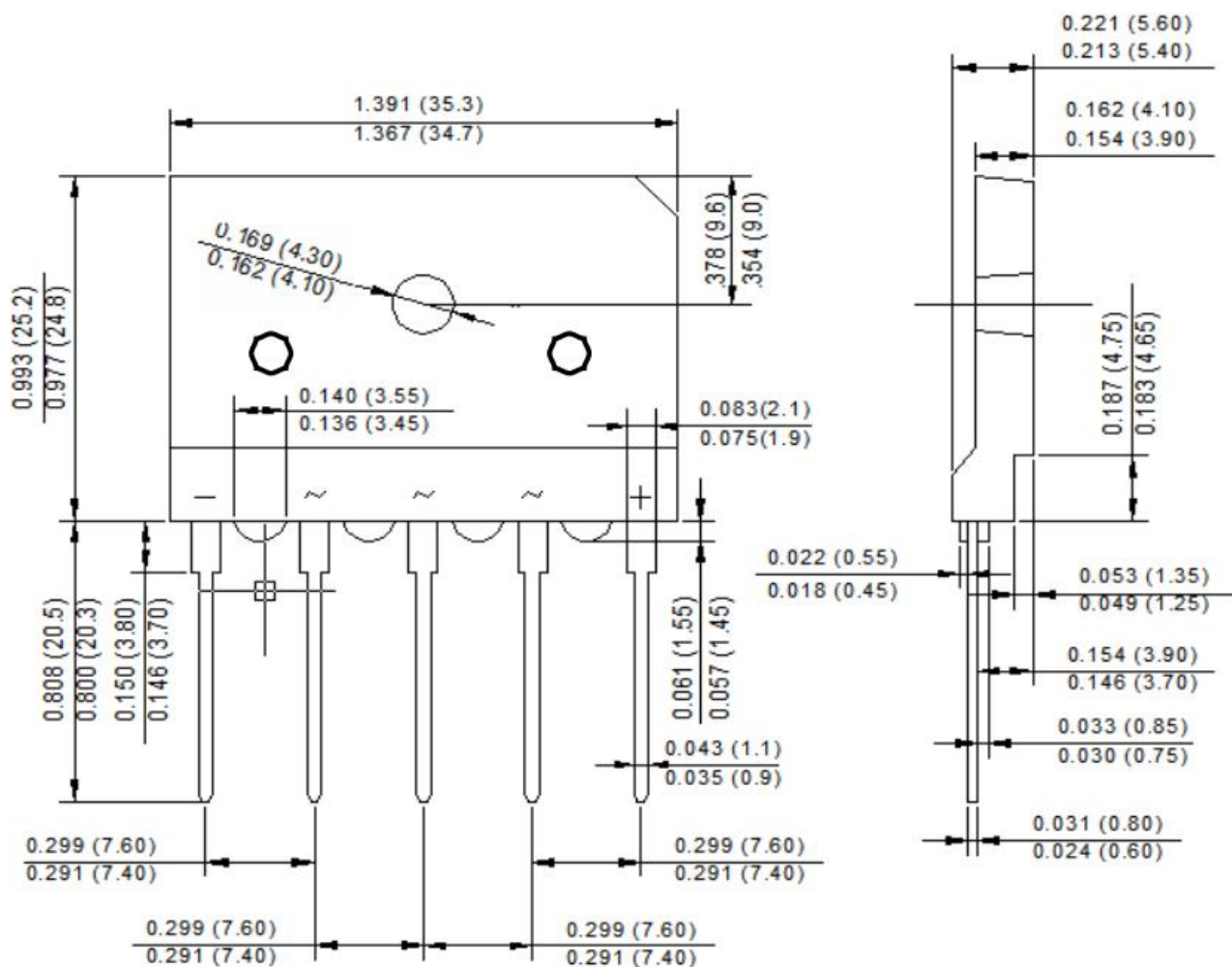


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Package Information

SGBJ

Dimensions in Inches (Millimeters)





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