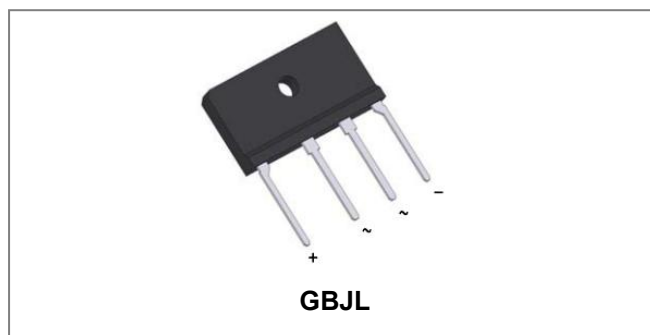


GBJL25J-GBJL25M

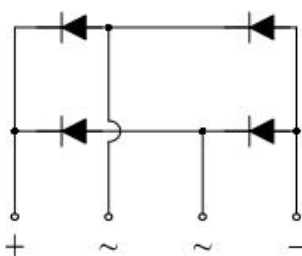
Single-Phase 15.0A Glass Passivated Bridge Rectifier



Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Plastic material-UL flammability 94V-0
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram



Mechanical Data

- Case: GBJL, Molded plastic
- Terminals: Plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on body
- Mounting Position: Any
- Lead Free: For RoHS / Lead Free Version
- Mounting Torque: 10cm·kg (8.8inches·lbs) max;
- Recommend Torque: Mounting Torque: 5.7cm·kg (5inches·lbs);

Maximum Ratings @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Type Number	Symbol	GBJL25J	GBJL25K	GBJL25M	Units
Peak Repetitive Reverse Voltage	V_{RRM}	600	800	1000	V
Working Peak Reverse Voltage	V_{RWM}				
DC Blocking Voltage	V_{DC}				
RMS Reverse Voltage	V_{RMS}	420	560	700	V
Average forward rectified output current @ $T_C = 110^{\circ}\text{C}$	$I_{(AV)}$	25.0			A
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	350			A
Rating for fusing ($t < 8.3\text{ms}$)	I^2t	508			A^2sec

Electrical Characteristics @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Type Number	Symbol	GBJL25J	GBJL25K	GBJL25M	Units
Forward Voltage (per element) @ $I_F = 12.5\text{A}$	V_F	1.0			V
Peak Reverse Current @ $T_A = 25^{\circ}\text{C}$ At Rated DC Blocking Voltage @ $T_A = 125^{\circ}\text{C}$	I_{RM}	5 150			μA

* Pulse width < 300 μs , duty cycle < 2%

Thermal-Mechanical Specifications:

Type Number	Symbol	GBJL25J	GBJL25K	GBJL25M	Units
Typical Thermal Resistance (per leg)	$R_{\theta JA}$ $R_{\theta JL}$	22 ⁽²⁾ 2.5 ⁽¹⁾			$^{\circ}\text{C}/\text{W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150			$^{\circ}\text{C}$

Notes: 1. Unit case mounted on Al plate heatsink;
2. Units mounted on PCB without heatsink;
3. Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw.

Ratings and Characteristics Curves

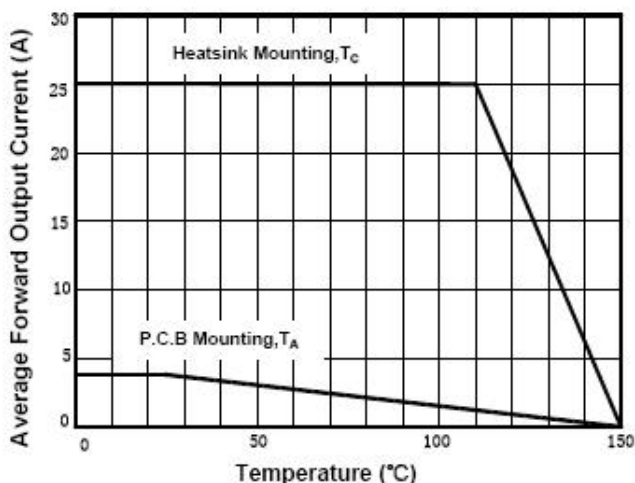


Figure 1. Derating Curve Output Rectified Current

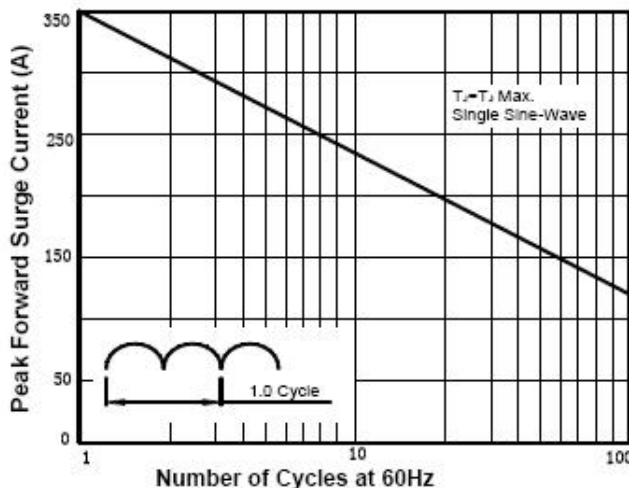


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current per Diode

Technical Data
Data Sheet N2254, Rev. -

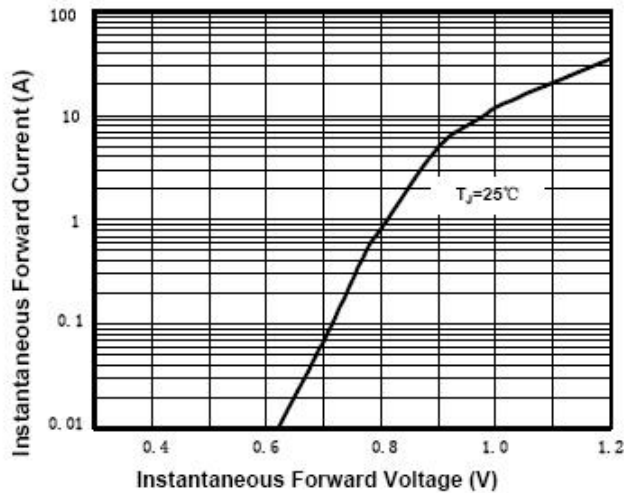


Figure 3. Typical Forward Characteristics Per Diode

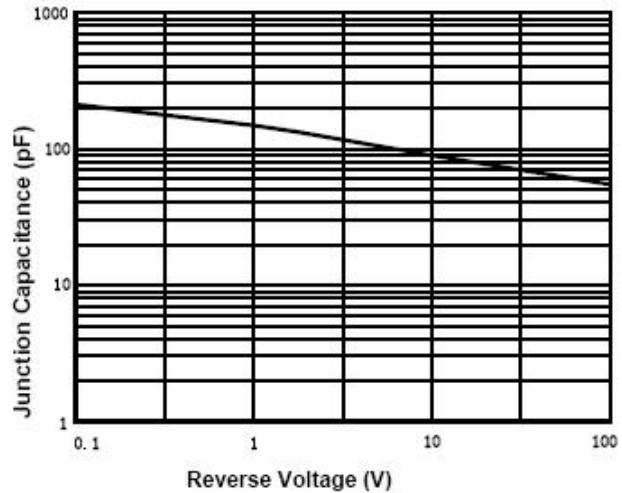


Figure 4. Typical Junction Capacitance Per Diode

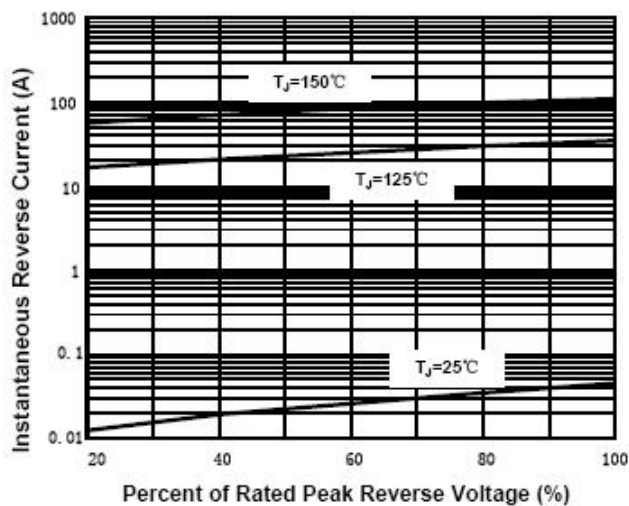
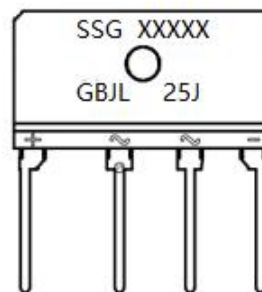


Figure 5. Typical Reverse Characteristics Per Diode

Ordering Information

Device	Package	Plating	Shipping
GBJL25J THRU GBJL25M	GBJL(Pb-Free)	Pure Sn	20pcs / tube

Marking Diagram

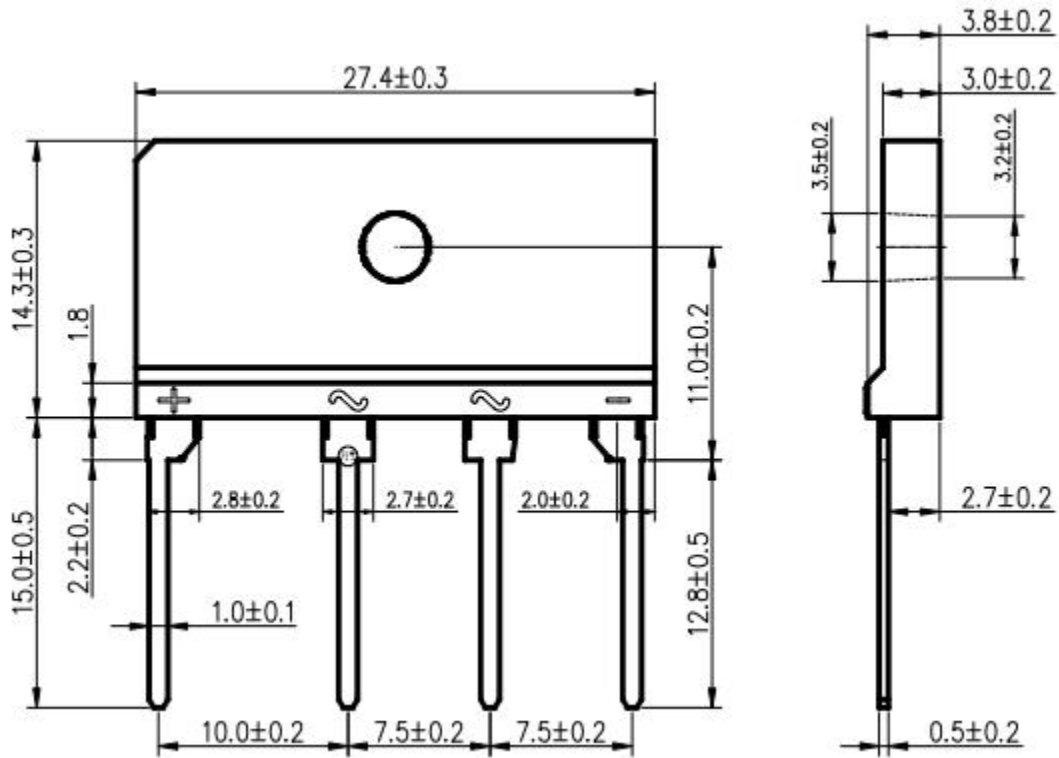


Where XXXXX is YYWWL

SSG = SSG
YY = Year
WW = Week
L = Lot Number
GBJL25J = Type Number

Cautions: Molding resin
Epoxy resin UL:94V-0

Mechanical Dimensions GBJL (Millimeters)





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