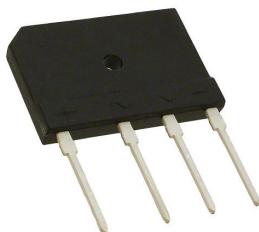


GBJ1506L

Single-Phase 15.0A Glass Passivated Bridge Rectifier

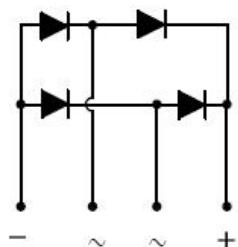


GBJ

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: GBJ, Molded plastic
- Terminals: Plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting Position: Any
- Lead Free: For RoHS / Lead Free Version
- Weight: 6.8 grams(approx)

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

Type Number	Symbol	GBJ1506L	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{DC}	600	V
RMS Reverse Voltage	V_{RMS}	420	V
Average rectified output current (with heatsink Note 1) @ $T_c=90^\circ\text{C}$ (without heatsink)	$I_{(AV)}$	15 7.5	A
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	240	A
I^2t Rating for Fusing (t < 8.3ms)	I^2t	239.04	A^2s

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

Type Number	Symbol	GBJ2506L		Units
Forward Voltage @ $I_F = 7.5A$ @ $I_F = 15A$	V_F	TYPE	MAX	V
		0.89	0.93	
Peak Reverse Current @ $T_A = 25^\circ C$ At Rated DC Blocking Voltage @ $T_A = 125^\circ C$	I_{RM}	5.0 200		μA
Dielectric Strength		2500		
The proposed installation torque Max torque	T_{or}	Typ. 5.0 Max 8.0		Kgf.cm
Typical Junction Capacitance(Per Element) (Note 2)		100		
	C_J			pF

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

Thermal-Mechanical Specifications:

Type Number	Symbol	GBJ2506L		Units
Typical Thermal Resistance	$R_{\theta JC}$	2.2		$^\circ C/W$
Operating and Storage Temperature Range	T_J, T_{STC}	-55 to +150		$^\circ C$

Note: 1. Unit case mounted on aluminum plate heatsink.

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

Ratings and Characteristics Curves

Fig. 1 Forward Current Derating Curve

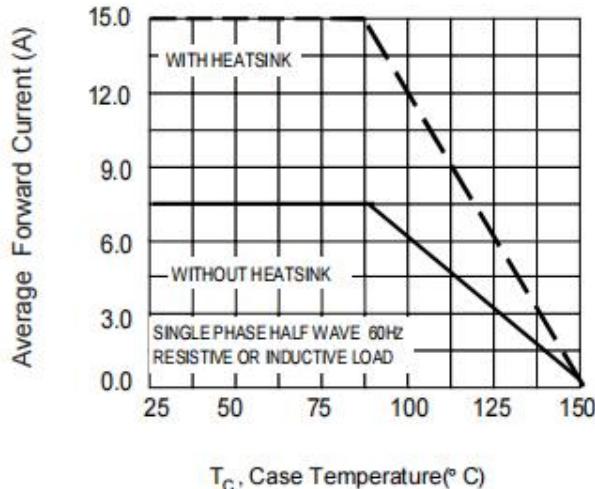
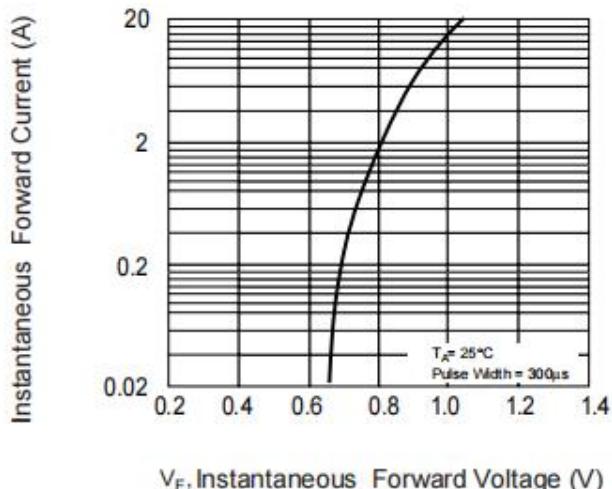


Fig. 2 Typ. Forward Characteristics



Technical Data
Data Sheet N2560, Rev. A



Fig.3 Maximum Peak Forward Surge Current

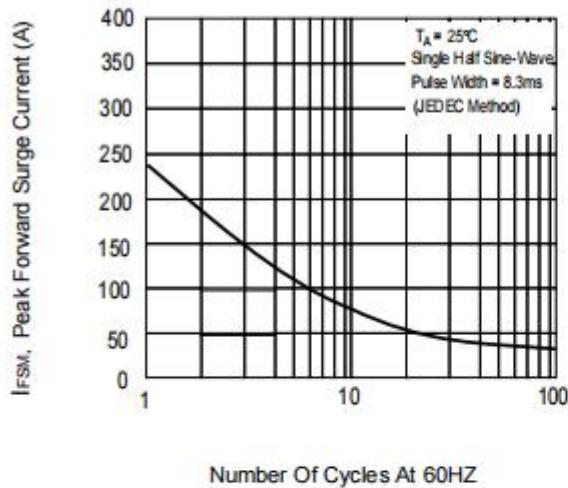


Fig. 4 Typical Junction Capacitance

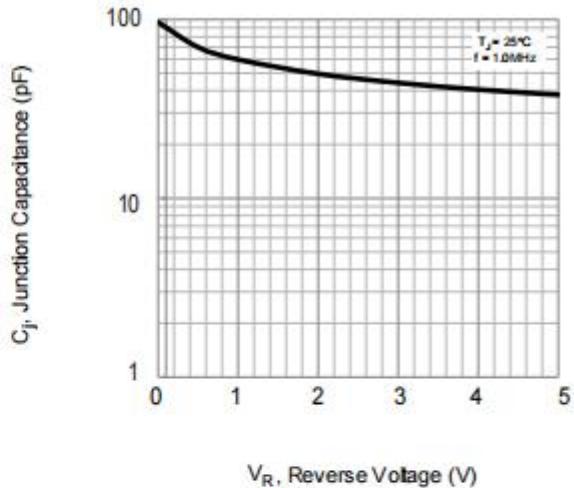
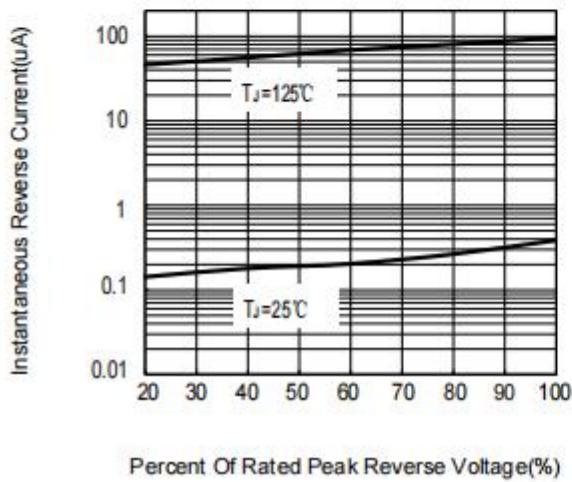


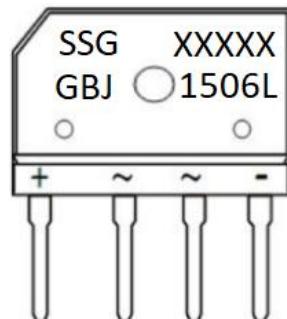
Fig.5 Typical Reverse Characteristics



Ordering Information

Device	Package	Plating	Shipping
GBJ1506L	GBJ(Pb-Free)	Pure Sn	15pcs / tube

Marking Diagram

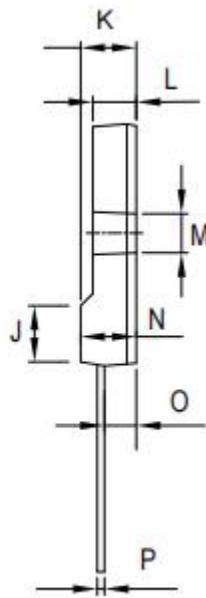
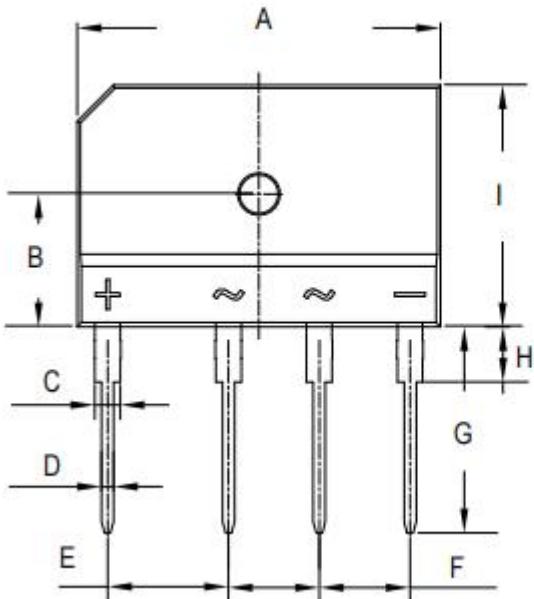


Where XXXXX is YYWWL

SSG = SSG
 YY = Year
 WW = Week
 L = Lot Number
 GBJ1506L = Type Number

Cautions: Molding resin
Epoxy resin UL94V-0

Mechanical Dimensions GBJ (Inches/Millimeters)



Dimensions	Millimeters		Inches	
	Min	Max	Min	Max
A	29.7	30.3	1.169	1.193
B	10.8	11.2	0.425	0.441
C	1.9	2.3	0.075	0.091
D	0.9	1.1	0.035	0.043
E	9.8	10.2	0.386	0.402
F	7.3	7.7	0.287	0.303
G	17.0	18.0	0.699	0.709
H	3.8	4.2	0.150	0.165
I	19.7	20.3	0.776	0.799
J	4.8	5.2	0.189	0.205
K	4.4	4.8	0.173	0.189
L	3.4	3.8	0.134	0.150
M	3.1	3.4	0.122	0.134
N	4.4	4.8	0.173	0.189
O	2.4	2.8	0.094	0.110
P	0.5	0.7	0.020	0.028

Technical Data
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