GBJ2508L

SINGLE PHASE25.0AMPS.GLASS PASSIVATED BRIDGE RECTIFIERS

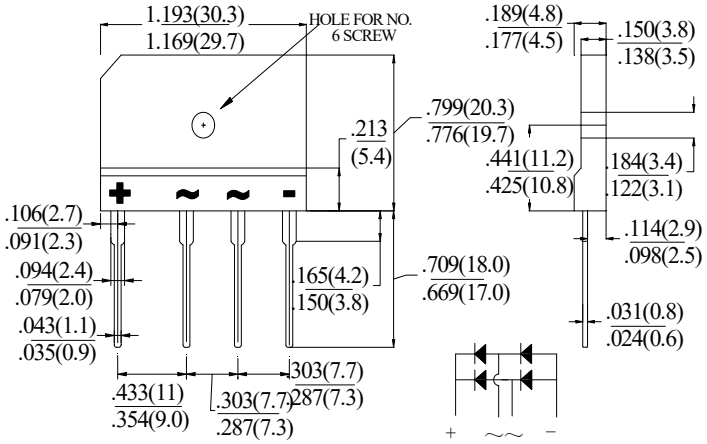
FEATURE

. UL Listed Under Recognized Component Index, File Number E338195
. Glass passivated chip junctions
. High case dielectric stength
. Low Reverse Leakage Current
. High surge current capability
. Ideal for Printed Circuit Board Applications

MECHANICAL DATA

. Case: GBJ
. Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
. Terminals: Pure tin plated, Lead free. Leads solderable per MIL-STD-750, Method 2026.
. Polarity: Molded on Body
. Mounting: Through Hole for #6 Screw
. Mounting Torque: 5.0 in-lbs Maximum
. Weight:6.6grams

GBJ



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Type Number	SYMBOL	GBJ2508L	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	800	V
Maximum RMS Voltage	V_{RMS}	560	V
Maximum DC blocking Voltage	V_{DC}	800	V
Maximum Average Forward (with heatsink Note2) Rectified Current @ T_C=100°C(without heatsink)	$I_{F(AV)}$	25.0 4.2	A
Peak Forward Surge Current @ T_J=25°C 8.3ms single half sine-wave @ T_J=125°C	I_{FSM}	600 480	A
Peak Forward Surge Current @ T_J=25°C 1.0ms single half sine-wave @ T_J=125°C	I_{FSM}	1200 960	A
Maximum Forward Voltage Drop per element at 12.5 A DC	V_F	0.95	V
Maximum DC Reverse Current @T_J =25°C at rated DC blocking voltage @T_J =125°C	I_R	10.0 500.0	μA
I^2t Rating for Fusing (t < 8.3ms)	I^2t	1494	A^2Sec
Typical Junction Capacitance (Note 1)	C_J	190	pF
Typical Thermal Resistance (Note 2)	$R_{(JC)}$	1.0	°C/W
Storage Temperature	T_{STG}	-55 to +150	°C
Operating Junction Temperature	T_J	-55 to +150	°C

Note:
1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Device mounted on 250mm x 250mm x 2.0mm Aluminum Plate Heatsink.

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

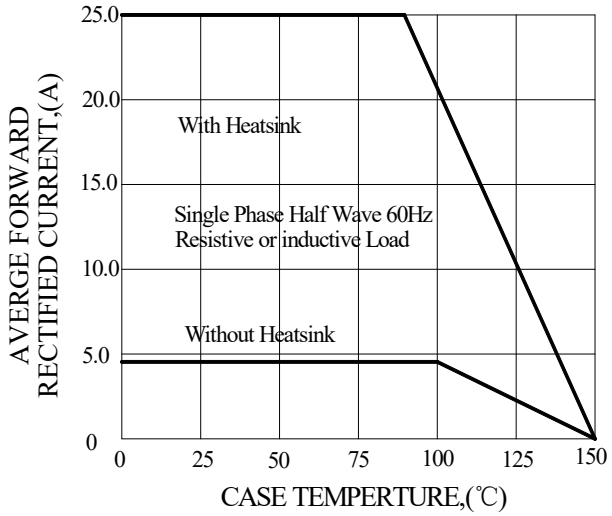


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

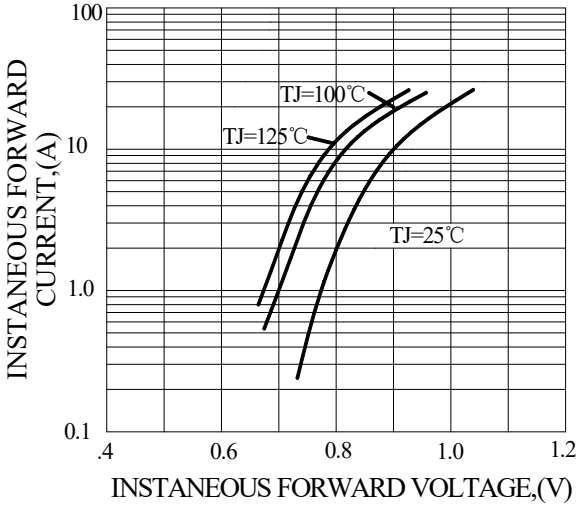


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

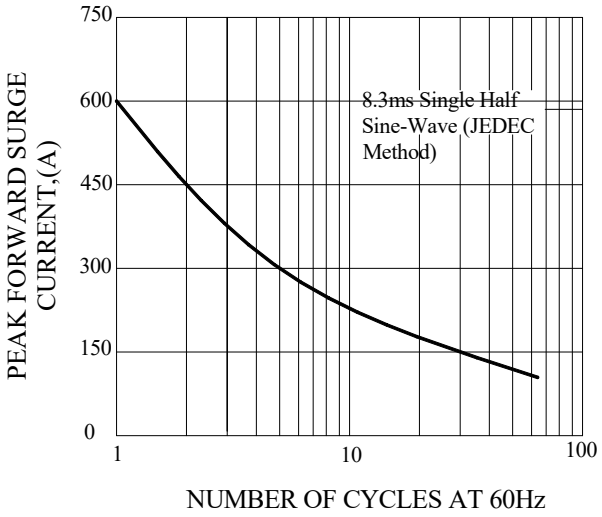


FIG.4-TYPIAL JUNCTION CAPACITANCE

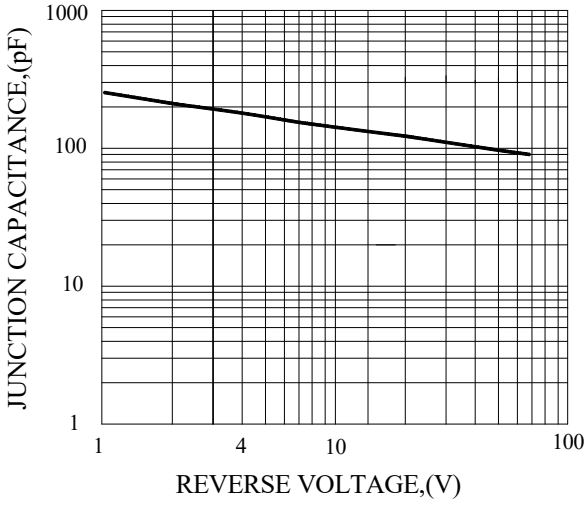


FIG.5-TYPICAL REVERSE CHARACTERISTICS