GBJ3006 THRU GBJ3010

SINGLE PHASE30.0AMPS.GLASS PASSIVATED BRIDGE RECTIFIERS

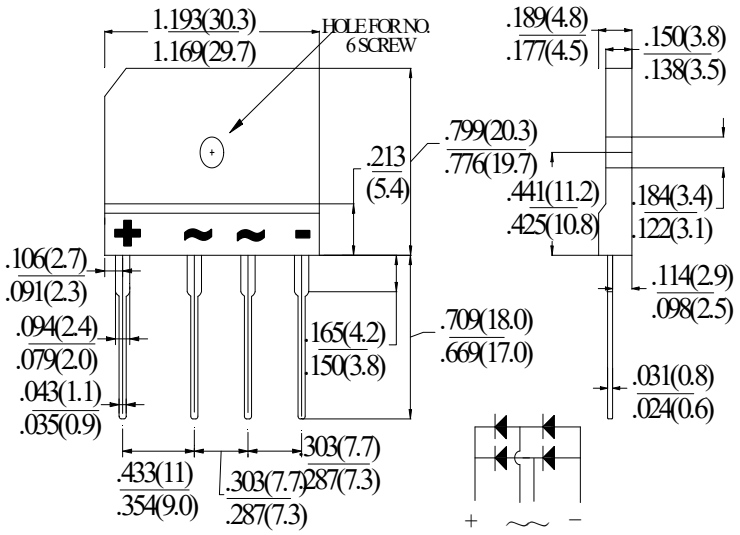
FEATURE

. 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 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

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	GBJ3006	GBJ3008	GBJ3010	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	420	560	700	V
Maximum DC blocking Voltage	V_{DC}	600	800	1000	V
Maximum Average Forward (with heatsink Note2) Rectified Current @ T_C=100°C(without heatsink)	$I_{F(AV)}$	30.0 4.2			A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	350			A
Maximum Forward Voltage Drop per element @15.0 A DC	V_F	1.1			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	510			A^2Sec
Typical Junction Capacitance (Note 1)	C_J	90			pF
Typical Thermal Resistance (Note 2)	$R_{(JC)}$	2.0			°C/W
	$R_{(JA)}$	18.0			
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

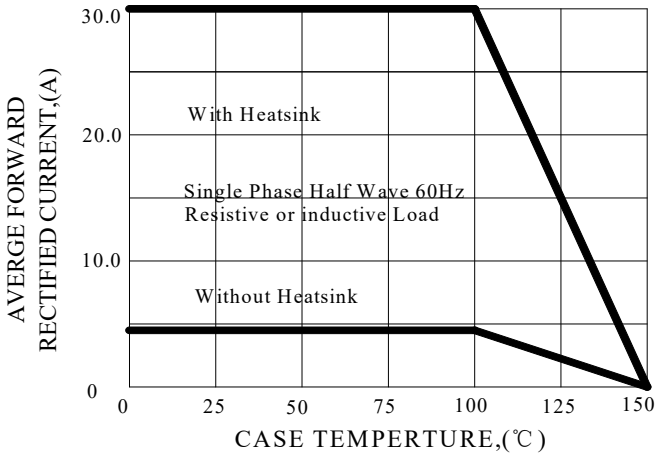


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

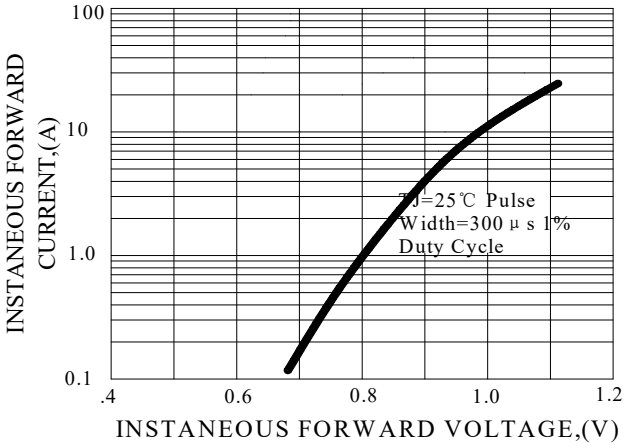


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

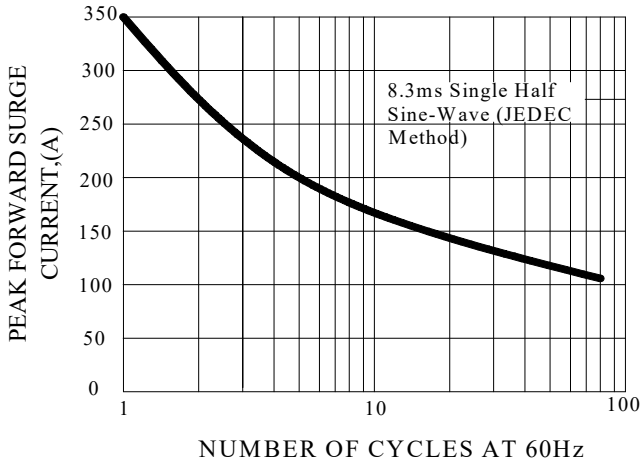


FIG.4-TYPIAL JUNCTION CAPAOTANCE

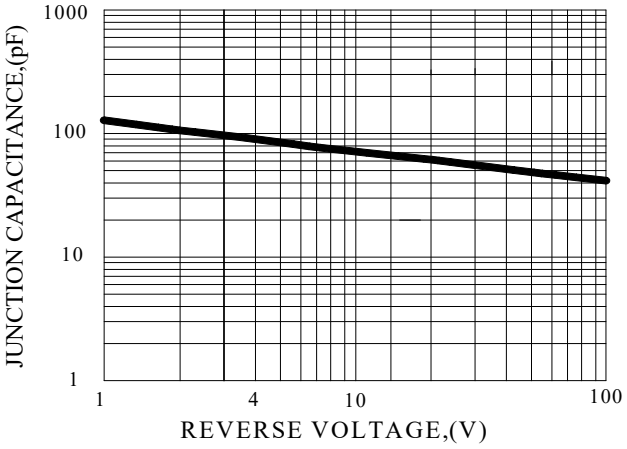


FIG.5-TYPICAL REVERSE CHARACTERISTICS