

RoHS Compliant Product

FEATURES

- UL Recognition
- Thin Single in-line Package
- High Surge Current Capability
- Solder Dip, Per JESD 22-B106

APPLICATIONS

- General Purpose use in AC/DC Bridge full Wave Rectification
- for Switching Power Supply, Home Appliances, Office Equipment, Industrial Automation Applications

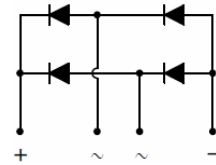
MECHANICAL DATA

- Molding Compound Meets UL 94 V-0 Flammability Rating
- Terminals: Tin Plated Leads, Solderable Per J-STD-002 and JESD22-B102
- Polarity: As Marked on Body

ORDER INFORMATION

Part Number	Type
GBJL2506	Lead (Pb)-free and Halogen-free

GBJ



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ Unless otherwise specified)

Parameter	Symbol	Rated	Unit	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	600	V	
Maximum RMS Voltage	V_{RMS}	420		
Maximum DC Blocking Voltage	V_{DC}	600		
Average Rectified Output Current @60Hz Sine Wave, R-load	I_o	with heat sink @ $T_C=104^\circ\text{C}$	25	A
		without heat sink @ $T_A=25^\circ\text{C}$	3.5	
Forward Surge Current (Non-Repetitive) @60Hz Half Sine Wave, 1 Cycle, $T_J=25^\circ\text{C}$	I_{FSM}	420	A	
Maximum Instantaneous Forward Voltage Drop Per Diode @ $I_{FM}=12.5\text{A}$	V_F	0.92	V	
Maximum DC Reverse Current @Rated DC Blocking Voltage Per Diode	I_R	$T_J=25^\circ\text{C}$	5	μA
		$T_J=125^\circ\text{C}$	200	
Typical Junction Capacitance Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	C_J	280	pF	
Current Squared Time @ $1\text{ms} \leq t \leq 8.3\text{ms}$ $T_J=25^\circ\text{C}$, Rating of Per Diode	I^2t	730	A^2s	
Thermal Resistance Junction-Ambient	without heat sink	$R_{\theta JA}$	18	$^\circ\text{C/W}$
Thermal Resistance Junction-Case	with heat sink	$R_{\theta JC}$	1	$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-55~150	$^\circ\text{C}$	

RATINGS AND CHARACTERISTIC CURVES

FIG1: I_o - T_c Curve

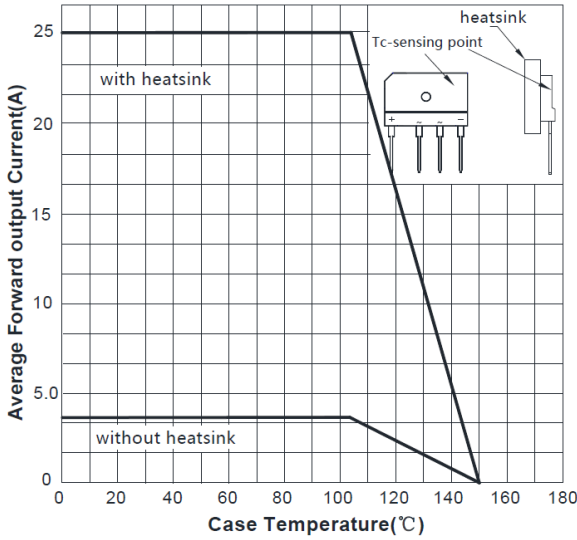


FIG2: Surge Forward Current Capability

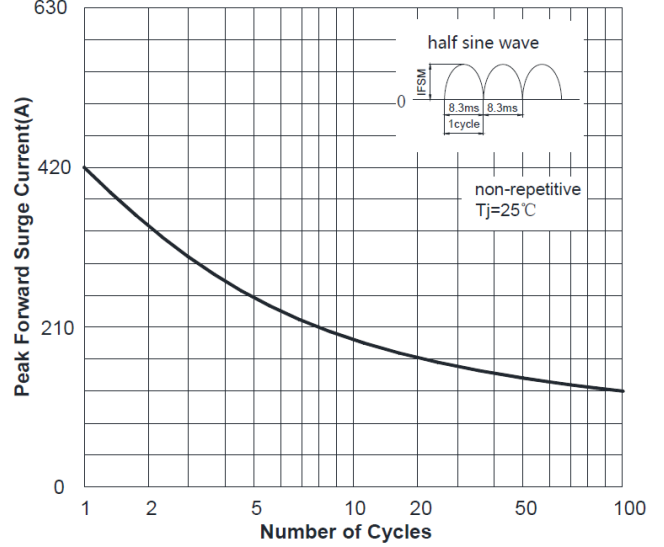


FIG3: Typical Forward Voltage

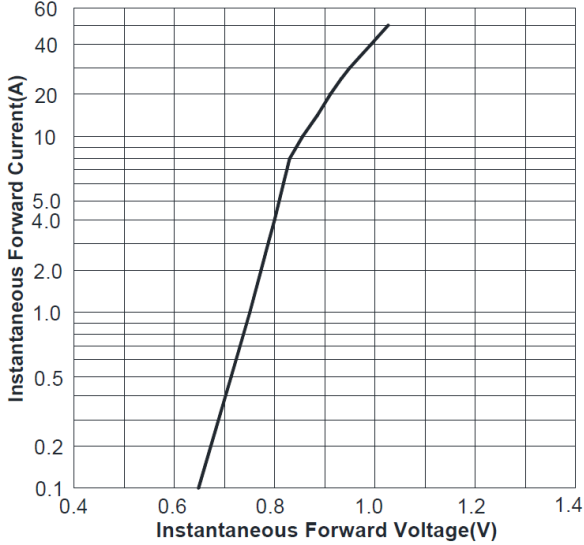
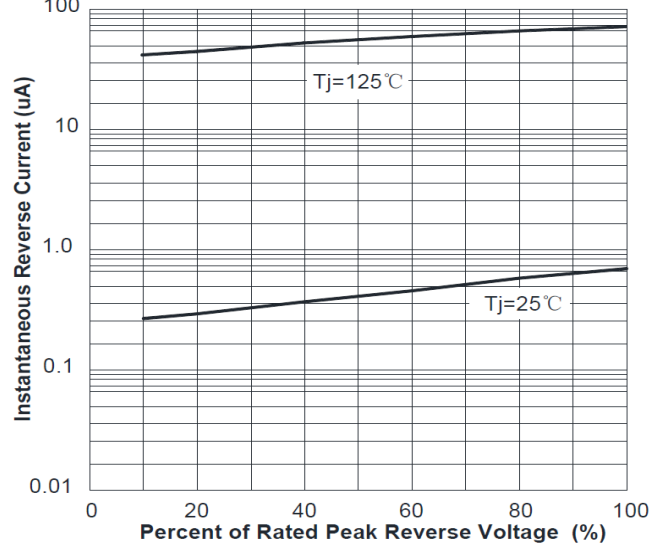
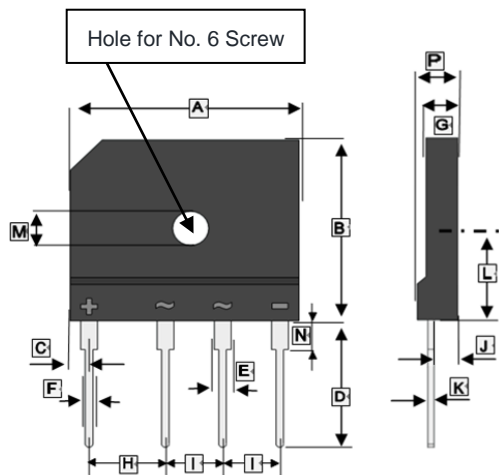


FIG4: Typical Reverse Characteristics



PACKAGE OUTLINE DIMENSION

GBJ



REF.	Millimeter	
	Min.	Max.
A	29.7	30.3
B	19.7	20.3
C	2.3	2.7
D	17	18
E	2.0	2.4
F	0.9	1.1
G	3.4	3.8
H	9.8	10.2
I	7.3	7.7
J	2.5	2.9
K	0.6	0.8
L	10.8	11.2
M	$\varnothing 3.1$	$\varnothing 3.4$
N	3.8	4.2
P	4.4	4.8