

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

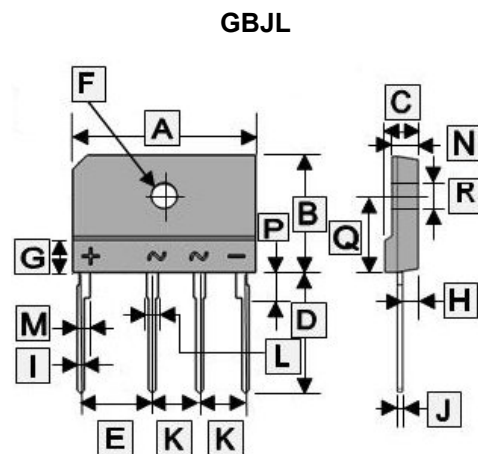
- Thin Single In-Line Package
- Ideal for Printed Circuit Boards
- Glass Passivated Chip Junction
- Low Profile Package
- High Surge Current Capability
- High Case Dielectric Strength of 2500 V_{RMS}
- Plastic Package has Underwrites Laboratory Flammability Classification 94V-0

MECHANICAL DATA

- Case: GBJL; Epoxy meets UL-94V-0 Flammability Rating
- Terminals: Matte Tin Plated Leads, Solderable Per J-STD-002 and JESD22-B102 E3 Suffix for Customer Grade, meet JESD 201
- High Temperature Soldering Guaranteed: Solder Dip 270°C, 10seconds
- Polarity: As Marked on Body
- Mounting Torque: 10cm-kg (8.8inches-lbs) max
- Recommend Torque: Mounting Torque: 5.7cm-kg (5inches-lbs)

ORDER INFORMATION

Part Number	Type
GBJL1506~GBJL1510	Lead (Pb)-free
GBJL1506-C~GBJL1510-C	Lead (Pb)-free and Halogen-free



REF.	Min.	Max.	REF.	Min.	Max.
A	27.1	27.7	J	0.3	0.7
B	14	14.6	K	7.3	7.7
C	3.6	4	L	2.5	2.9
D	14.5	15.5	M	2.6	3
E	9.8	10.2	N	2.8	3.2
F	3.3	3.7	P	2	2.4
G	1.8 REF.		Q	8.4	9.2
H	2.5	2.9	R	3	3.4
I	0.9	1.1			

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise specified)

Parameter		Symbol	Part Number			Unit
			GBJL1506	GBJL1508	GBJL1510	
Maximum Recurrent Peak Reverse Voltage		V _{RRM}	600	800	1000	V
Maximum RMS Voltage		V _{RMS}	420	560	700	
Maximum DC Blocking Voltage		V _{DC}	600	800	1000	
Maximum Average Forward Rectified Output Current	T _C =110°C ¹	I _{F(AV)}	15			A
	T _A =25°C ²		3.2			
Peak Forward Surge Current 8.3ms Single Sine-Wave Superimposed on Rated Load (JEDEC Method)		I _{FSM}	240			A
Rating for Fusing (t<8.3ms)		I ² t	240			A ² S
Maximum Instantaneous Forward Voltage Drop Per Leg @7.5A		V _F	1			V
Maximum DC Reverse Current @ Rated DC Blocking Voltage Per Leg	T _A =25°C	I _R	5			μA
	T _A =125°C		150			
Typical Thermal Resistance Per Leg ²		R _{θJA}	22			°C/W
Typical Thermal Resistance Per Leg ¹		R _{θJC}	2.5			
Junction and Storage Temperature Range		T _J , T _{STG}	-55~150			°C

Notes:

1. Unit case mounted on Al plate heatsink.
2. Units mounted on PCB without heatsink.

RATINGS AND CHARACTERISTIC CURVES

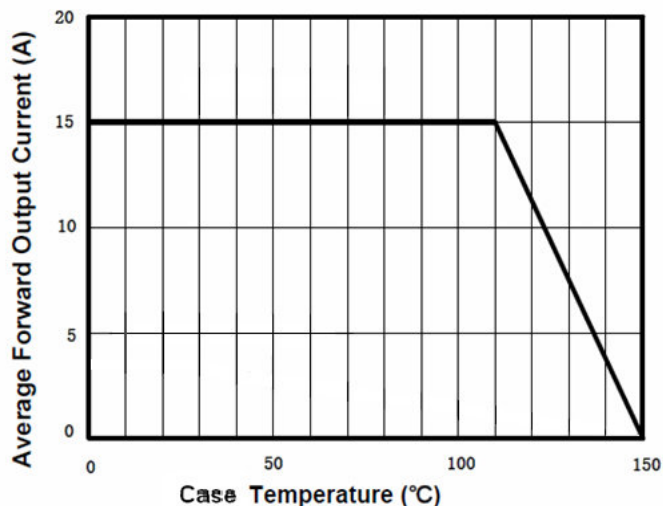


Figure 1. Derating Curve Output Rectified Current

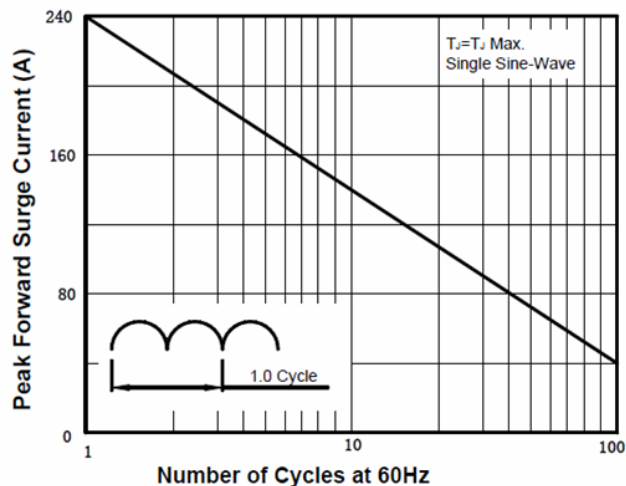


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current per Diode

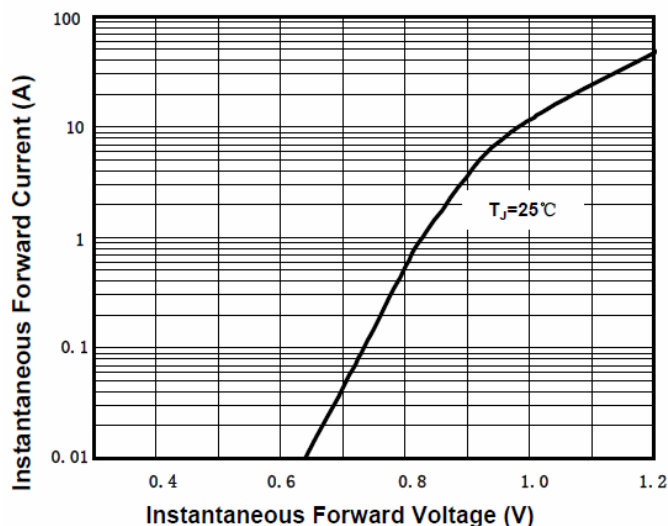


Figure 3. Typical Forward Characteristics Per Diode

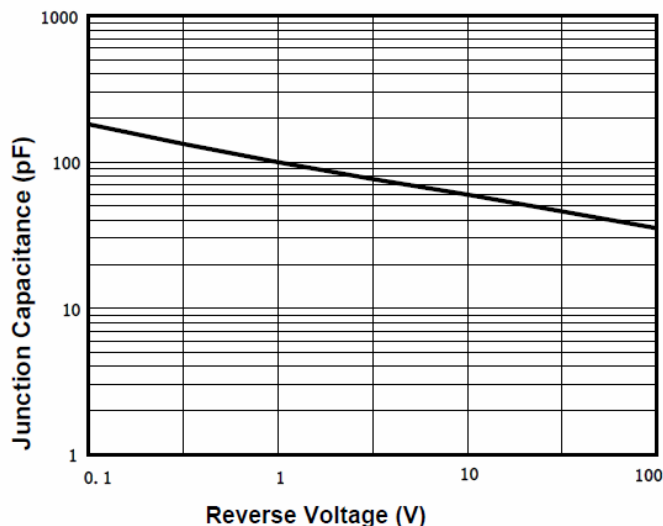


Figure 4. Typical Junction Capacitance Per Diode

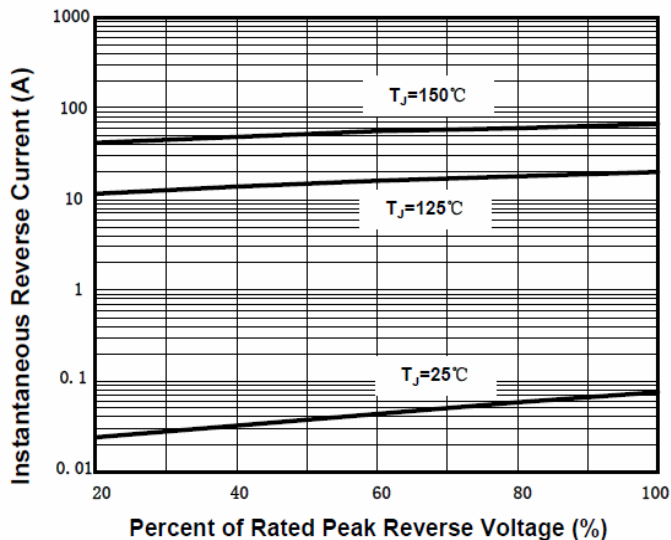


Figure 5. Typical Reverse Characteristics Per Diode