

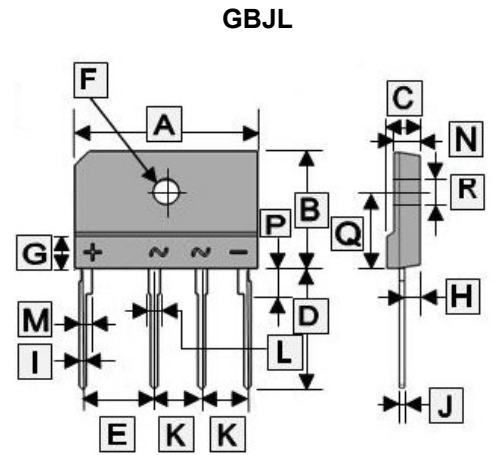
RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

**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<sub>RMS</sub>
- 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)



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		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			

**ORDER INFORMATION**

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

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS** (T<sub>A</sub>=25°C unless otherwise specified)

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

Notes:

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

**RATINGS AND CHARACTERISTIC CURVES**

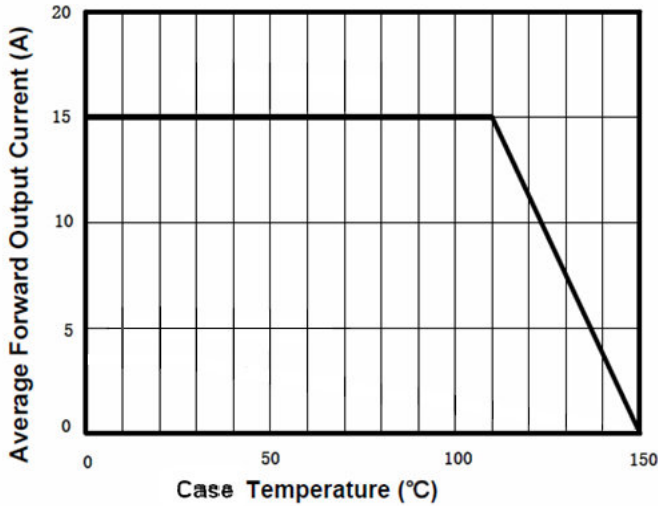


Figure 1. Derating Curve Output Rectified Current

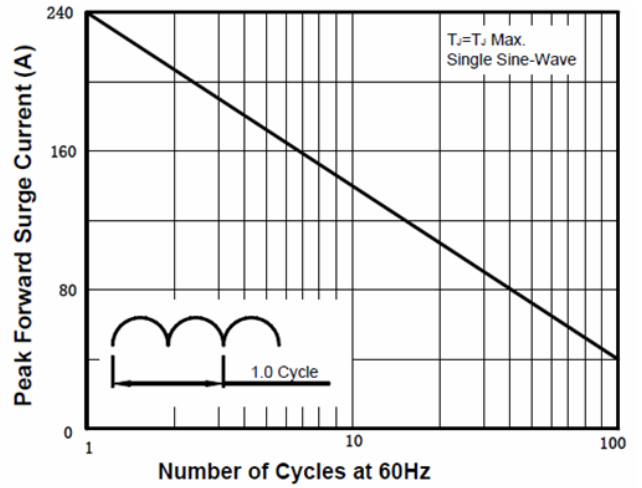


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current per Diode

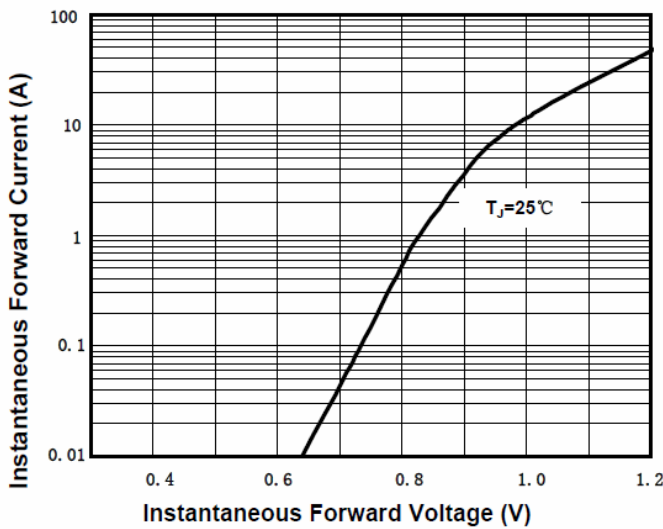


Figure 3. Typical Forward Characteristics Per Diode

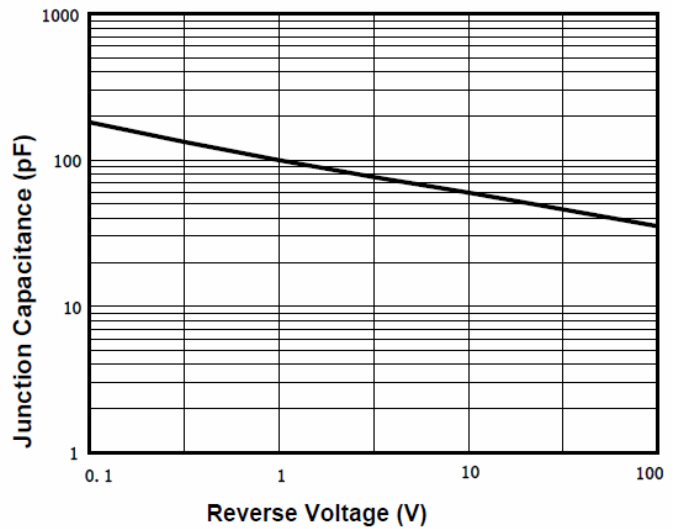


Figure 4. Typical Junction Capacitance Per Diode

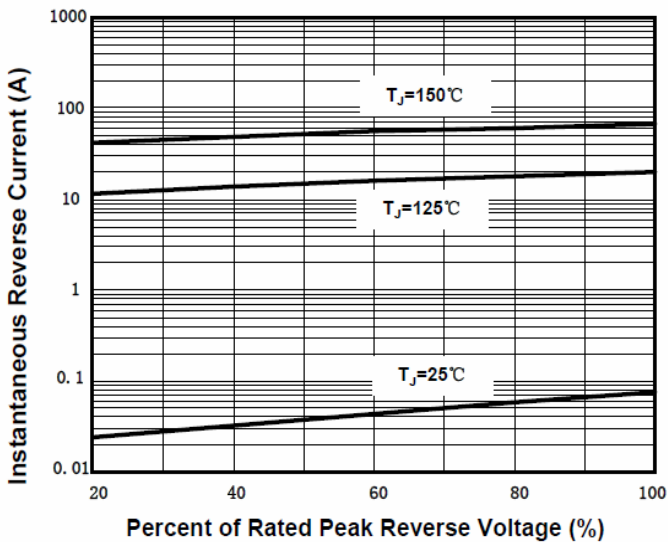


Figure 5. Typical Reverse Characteristics Per Diode