

GBJ Plastic-Encapsulate Bridge Rectifier

LOW VF Bridge Rectifier

Features

- $I_{F(AV)}$ 25A
- V_{RRM} 600V
- Low forward voltage
- Low leakage current

Applications

- General purpose Bridge rectifier applications

GBJ



Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions		GBJ25L06
Repetitive Peak Reverse Voltage	V_{RRM}	V			600
Maximum RMS Voltage	V_{RMS}	V			420
Maximum DC Blocking Voltage	V_{DC}	V			600
Average Rectified Output Current	I_O	A	60Hz sine wave, R-load, $T_a=100^{\circ}C$	On alumina substrate	25
Surge(Non-repetitive)Forward Current	I_{FSM}	A	8.3ms sine wave, 1 cycle, $T_j=25^{\circ}C$		350
Current Squared Time	I^2t	A^2S	$1ms \leq t < 8.3ms$ $T_j=25^{\circ}C$, Rating of per diode		425
Operation Junction and Storage Temperature Range	T_J, T_{stg}	$^{\circ}C$			-55 ~+150

Electrical Characteristics ($T_a=25^{\circ}C$ Unless otherwise specified)

Item	Symbol	Unit	Test Condition	Max
Peak Forward Voltage	V_{FM}	V	$I_{FM}=12.5A$, Pulse measurement, Rating of per diode	0.92
Peak Reverse Current	I_{RRM}	μA	$V_{RM}=V_{RRM}$, Pulse measurement, Rating of per diode	5
Thermal Resistance	$R_{\theta J-A}$	$^{\circ}C/W$	Between junction and ambient, Without heatsink	11
	$R_{\theta J-C}$		Between junction and case, With heatsink	1.2

Typical Characteristics

FIG.1-MAXIMUM FORWARD SURGE CURRENT

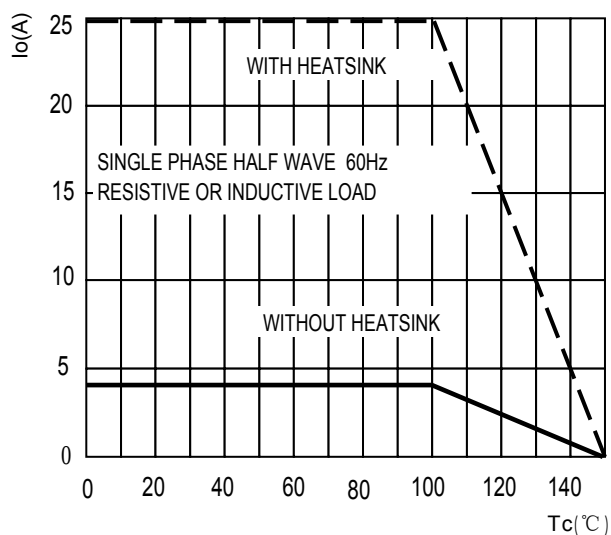


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

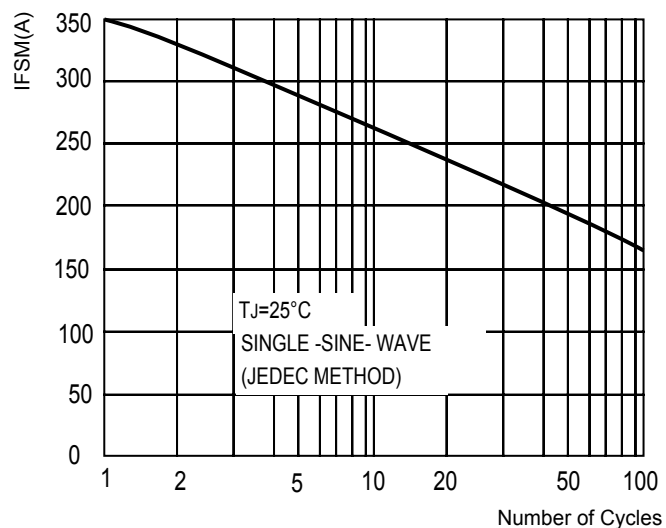


FIG.3-TYPICAL FORWARD CHARACTERISTICS

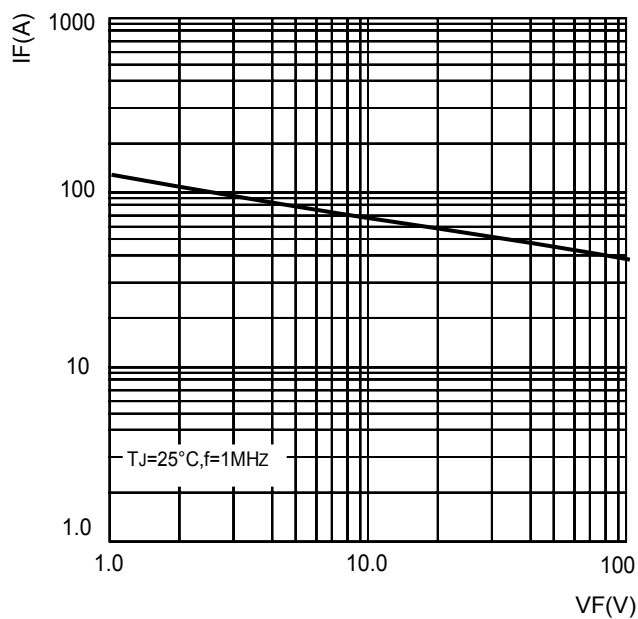


FIG.4-TYPICAL REVERSE CHARACTERISTICS

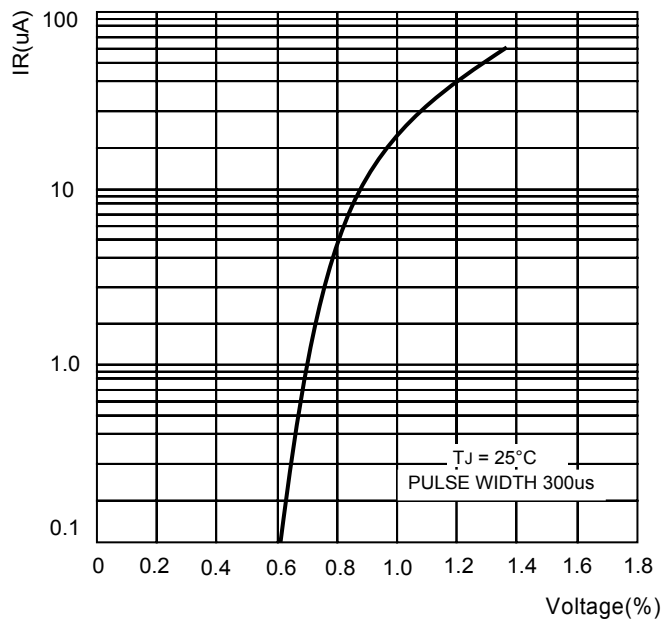
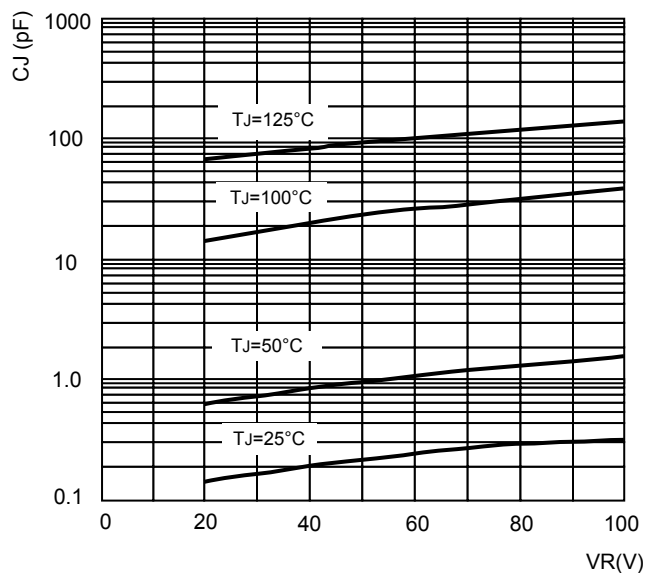
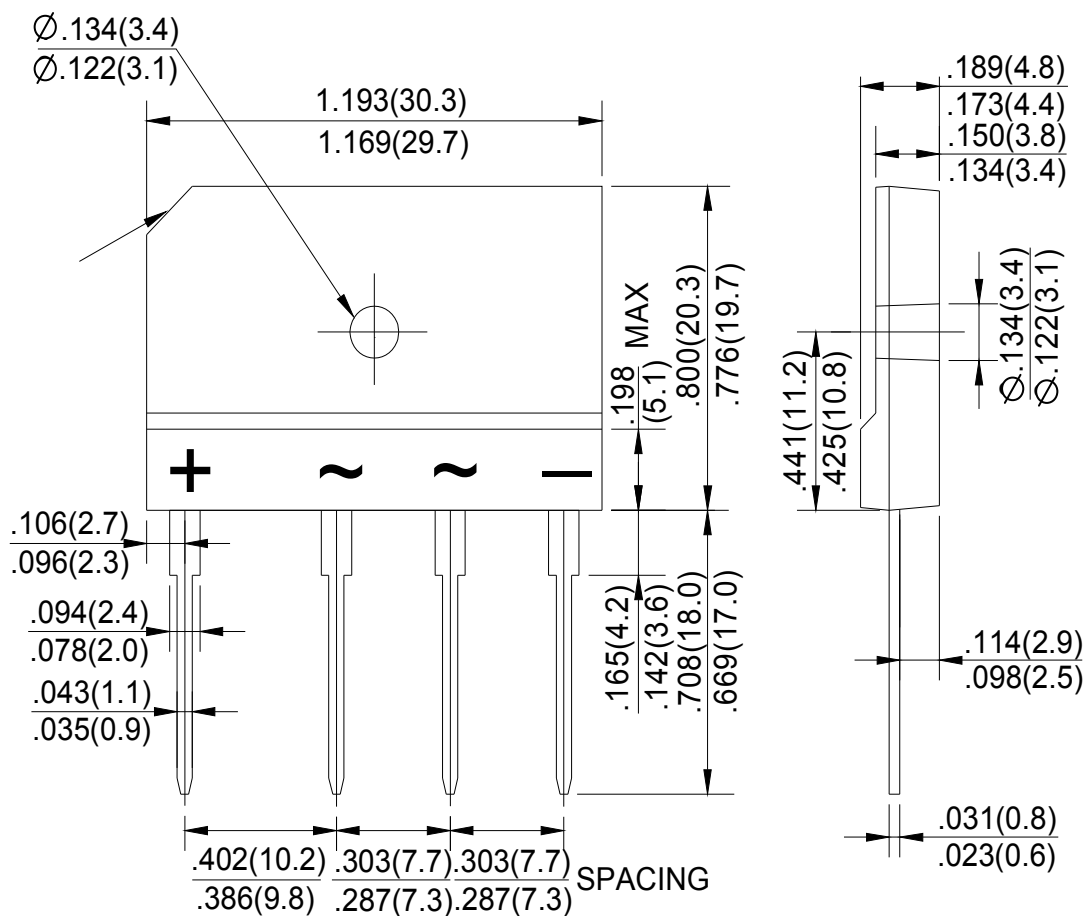


FIG.5-TYPICAL JUNCTION CAPACITANCE



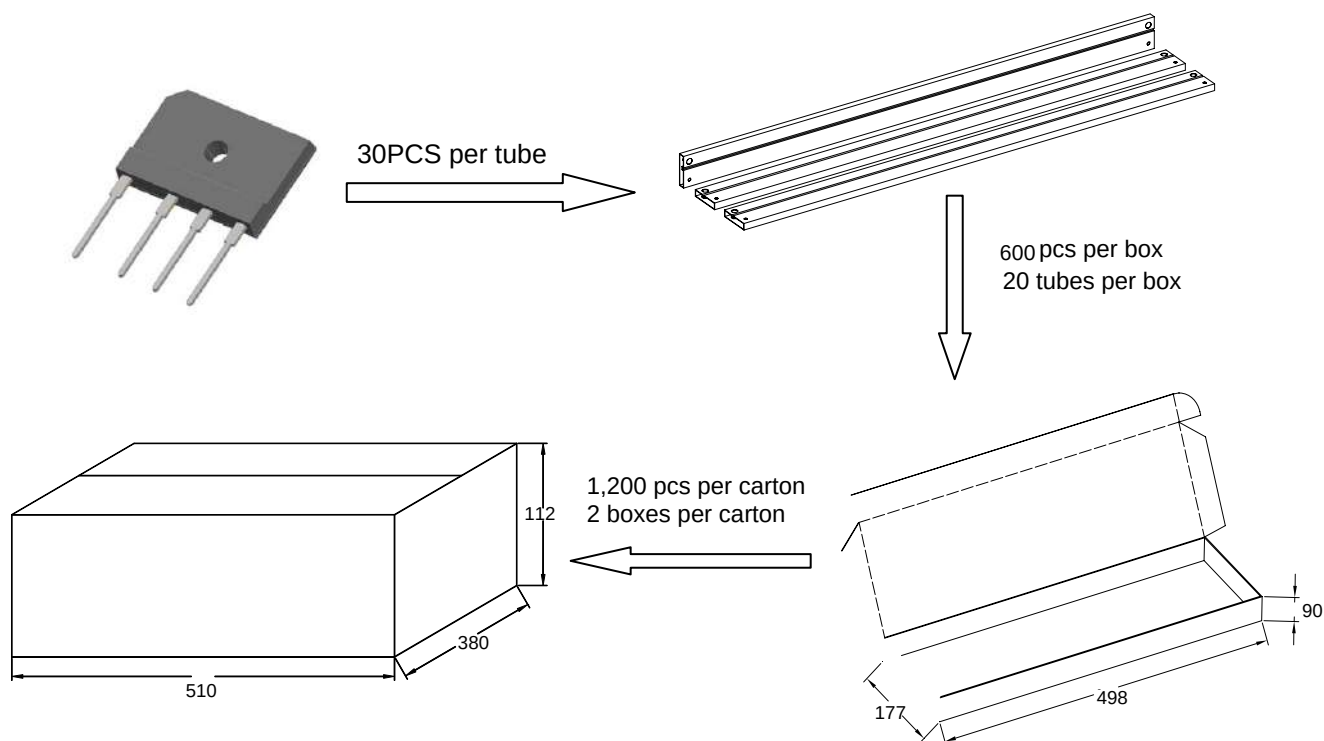
GBJ Package Outline Dimensions



Dimensions in inches and (millimeters)

Packaging Specifications of Tube Pack for GBJ

1. The method of packaging and dimension are shown as below figure. (Dimension in mm)



2. Tube



Storage

1 It is recommended to store the products in the following conditions:

Humidity: 75% R.H. Max.

Temperature : 0°C~35°C (32°F~95°F)

2 Shelf life : 12 month at < 0°C~35°C (32°F~95°F) and < 75% R.H.