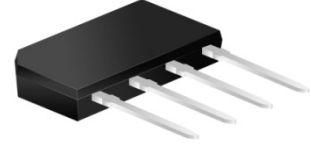


# SuperPlanar™ Bridge Rectifiers

## GBL3J--GBL3K

### Features

- Planar passivated chips
- Ultra low leakage reverse current
- High temperature performance
- High surge current capability
- Ideal for printed circuit boards
- High temperature soldering guaranteed:260°C/10 seconds
- RoHS Compliant



### Mechanical Data

- Case: GBL molded plastic
- Molding compound, UL flammability classification rating 94V-0
- Terminals: Leads solderable per MIL-STD-750,
- Mounting position: Any

### Maximum Ratings (@T<sub>A</sub> = 25°C unless otherwise specified)

Characteristic		Symbol	GBL3J	GBL3K	Units
Peak repetitive reverse voltage		V <sub>RRM</sub>	600	800	V
RMS reverse voltage		V <sub>RMS</sub>	420	560	V
DC blocking voltage		V <sub>DC</sub>	600	800	V
Maximum average forward output current		I <sub>F(AV)</sub>	3.0		A
Peak forward surge current, 8.3ms single half-sine-wave	@T <sub>J</sub> = 25°C	I <sub>FSM</sub>	90		A
I <sup>2</sup> t Rating for fusing	@T <sub>J</sub> = 25°C	I <sup>2</sup> t	33.6		A <sup>2</sup> s

### Thermal Characteristics

Parameter	Symbol	GBL3J	GBL3K	Units
Typical thermal resistance per leg (Note 1)	R <sub>θJA</sub>	36		°C/W
	R <sub>θJC</sub>	8		
Operating junction temperature range	T <sub>J</sub>	- 55 ---- + 150		°C
Storage temperature range	T <sub>STG</sub>	- 55 ---- + 150		°C

Note:

- (1) Units mounted on PCB without heatsink

**SuperPlanar™ Bridge Rectifiers**
**GBL3J--GBL3K**
**Electrical Characteristics** (@T<sub>A</sub> = 25°C unless otherwise specified)

Parameter	Symbol	Test conditions		Typ.	Max.	Units
Maximum instantaneous forward voltage	V <sub>F</sub>	I <sub>F</sub> =1.5A Per Diode		0.91	0.95	V
		I <sub>F</sub> =3.0A Per Diode		0.95	1.0	
Maximum Reverse current	I <sub>R</sub>	Rated V <sub>R</sub> , Per Diode	@T <sub>A</sub> =25°C	0.1	1.0	μA
			@T <sub>A</sub> =150°C	20	80	

# SuperPlanar™ Bridge Rectifiers

## GBL3J--GBL3K

### Ratings and Characteristic Curves ( $T_A=25^\circ\text{C}$ unless otherwise noted)

Fig.1-Forward Current Derating Curve

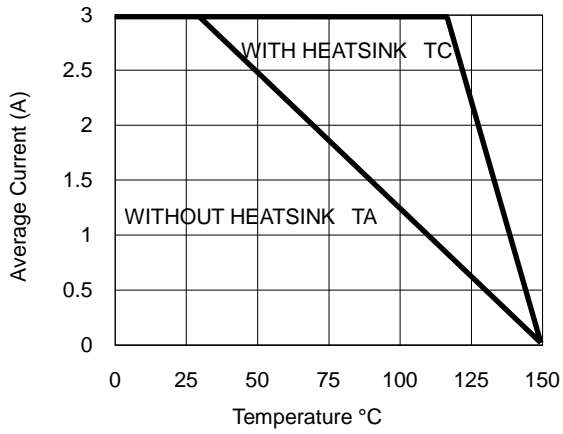


Fig.2- Surge Current Derating Curve

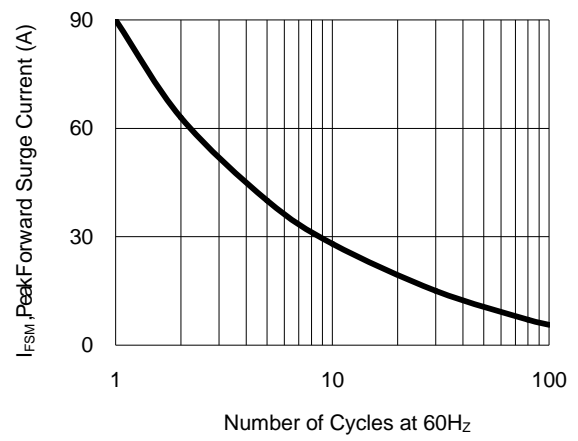


Fig.3- Typical Forward Voltage Characteristic

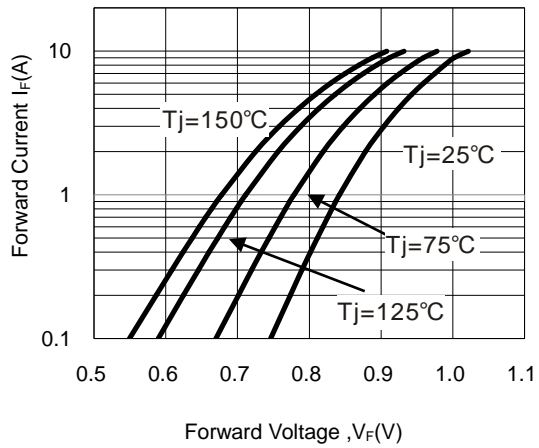
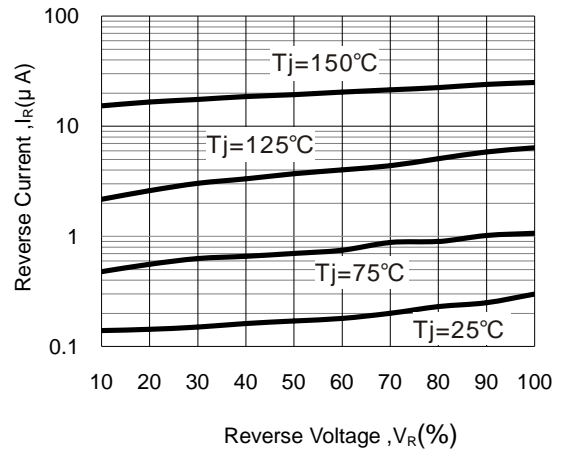


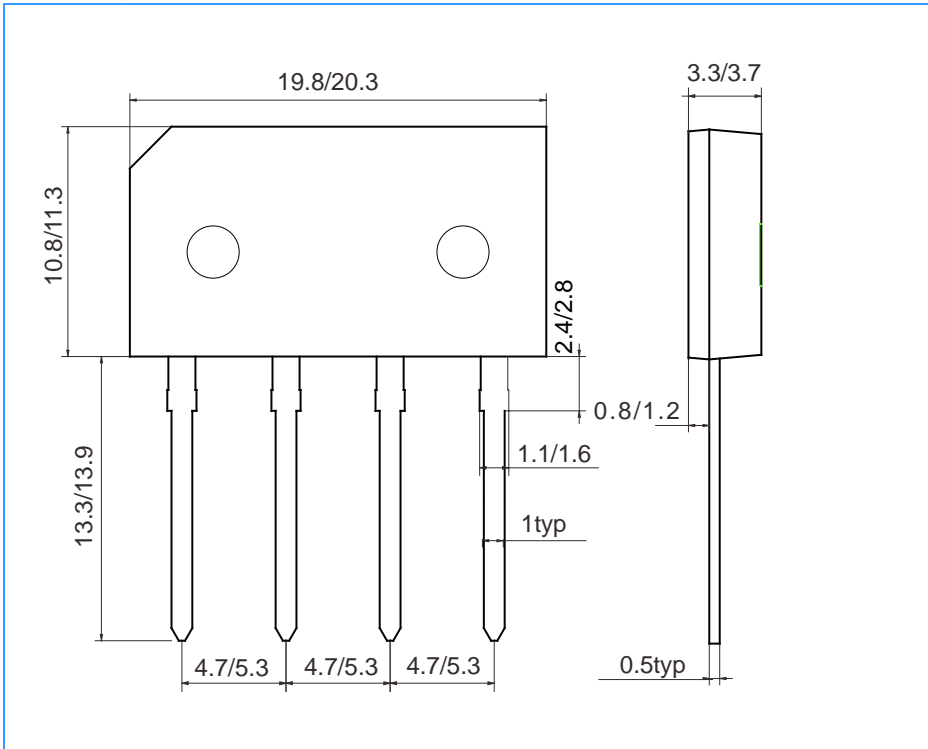
Fig.4- Typical Reverse Characteristic



# SuperPlanar™ Bridge Rectifiers

GBL3J--GBL3K

## Package Outline Dimensions(unit:mm)



## Ordering Information

Part No.	Marking	Package
GBL3J	GBL3J	GBL
GBL3K	GBL3K	GBL