



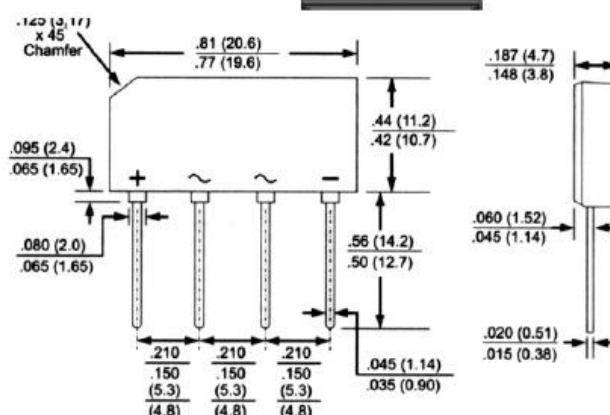
SYNSEMI SEMICONDUCTOR

## GBJ/KBJ2A thru GBJ/KBJ2M

Glass Passivated Single-Phase Bridge Rectifiers  
Voltage Range 50 to 1000 Volts Forward Current 2.0 Amperes

### Features

- ◆ Surge overload rating - 50 Amperes peak
- ◆ Ideal for printed circuit boards
- ◆ Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- ◆ Mounting Position: Any



Dimensions in inches and (millimeters)

### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Parameter	Symbols	KBJ2A	KBJ2B	KBJ2D	KBJ2G	KBJ2J	KBJ2K	KBJ2M	Units
		GBJ2A	GBJ2B	GBJ2D	GBJ2G	GBJ2J	GBJ2K	GBJ2M	
Maximum recurrent peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified output current at $T_A=50^\circ\text{C}$	$I_{FAV}$	2.0							Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	50.0							Amps
Max. instantaneous forward voltage drop per element at 1.0A	$V_F$	1.0							Volt
Maximum DC reverse current at rated DC blocking voltage per element $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	$I_R$	10.0							$\mu\text{A}$
		1.0							mA
Operating temperature range	$T_J$	-55 to +125							$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

# GBJ/KBJ2A thru GBJ/KBJ2M

## RATINGS AND CHARACTERISTIC CURVES

( $T_A = 25^\circ\text{C}$  unless otherwise noted)

FIG. 1 - DERATING CURVE  
OUTPUT RECTIFIED CURRENT

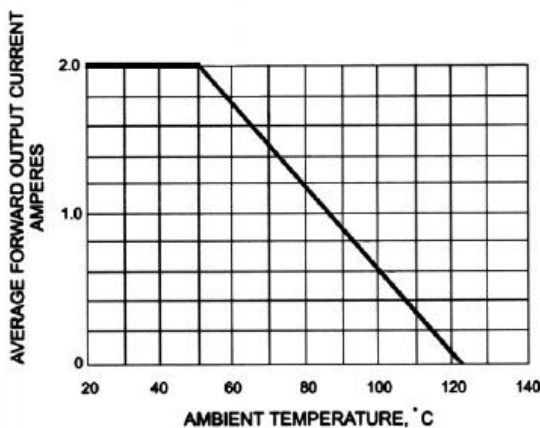


FIG. 2 - TYPICAL FORWARD  
CHARACTERISTICS

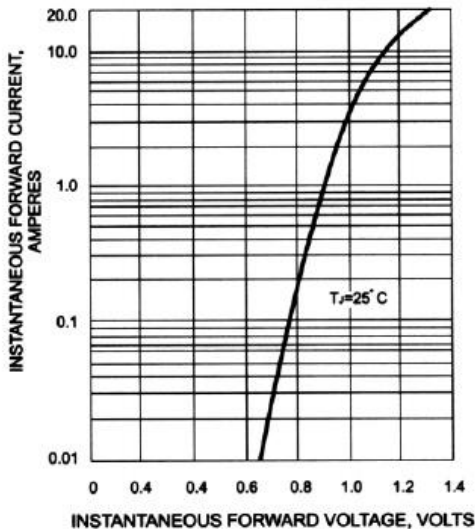


FIG. 3 - TYPICAL REVERSE  
CHARACTERISTICS

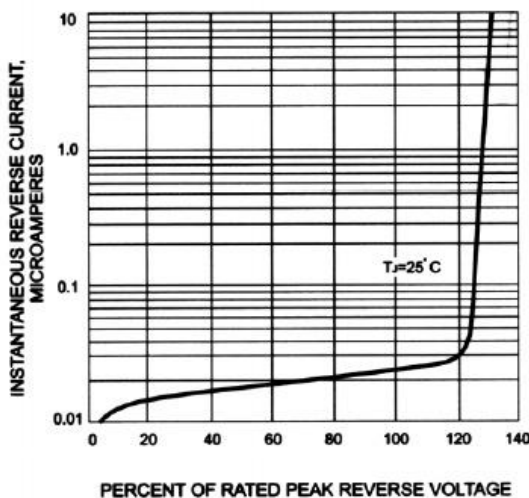


FIG. 4 - MAXIMUM FORWARD SURGE CURRENT

