

## G3B THRU G3K

### SINTERED GLASS JUNCTION RECTIFIER

VOLTAGE: 100V to 800V

CURRENT: 3.0A

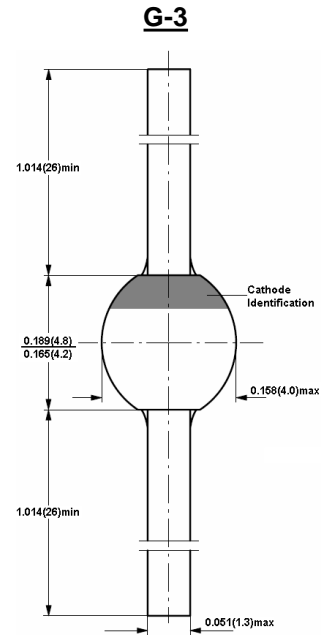


#### FEATURE

High temperature metallurgically bonded construction  
Sintered glass cavity free junction  
High temperature soldering guaranteed  
350°C /10sec/0.375"lead length at 5 lbs tension

#### MECHANICAL DATA

Terminal: Plated axial leads solderable per  
MIL-STD 202E, method 208C  
Case: G-3 sintered glass case  
Polarity: color band denotes cathode  
Mounting position: any



Dimensions in millimeters

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated,  
for capacitive load, derate current by 20%)

	SYMBOL	G3B	G3J	G3K	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	100	600	800	V
Maximum RMS Voltage	V <sub>rms</sub>	70	420	560	V
Maximum DC blocking Voltage	V <sub>dc</sub>	100	600	800	V
Maximum Average Forward Rectified Current 3/8"lead length at Ta =70°C	I <sub>f(av)</sub>	3.0			A
Peak Forward Surge Current 8.3ms single Half sine-wave superimposed on rated load	I <sub>fsm</sub>	125.0			A
Maximum Instantaneous Forward Voltage at 3.0A	V <sub>f</sub>	1.2	1.1		V
Maximum Full Load Reverse Current Full Cycle Average at 70°C	I <sub>r(av)</sub>	200.0			μA
Maximum DC Reverse Current at rated DC blocking voltage Ta =25°C Ta =150°C	I <sub>r</sub>	5.0 100.0			μA
Typical Reverse Recovery Time (Note 1)	T <sub>rr</sub>	3.0			μS
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	40.0			pF
Typical Thermal Resistance (Note 3)	R <sub>th(ja)</sub> R <sub>th(jl)</sub>	20.0 10.0			°C /W
Storage and Operating Junction Temperature	T <sub>stg</sub> , T <sub>j</sub>	-65 to +175			°C

Note:

1. Reverse Recovery Condition I<sub>f</sub> =0.5A, I<sub>r</sub> =1.0A, I<sub>rr</sub> =0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V<sub>dc</sub>
3. Thermal Resistance from Junction to Ambient and from Junction to Lead at 3/8"lead length, with both leads mounted between heatsinks

RATINGS AND CHARACTERISTIC CURVES G3B THRU G3K

FIG. 1 - FORWARD CURRENT DERATING CURVE

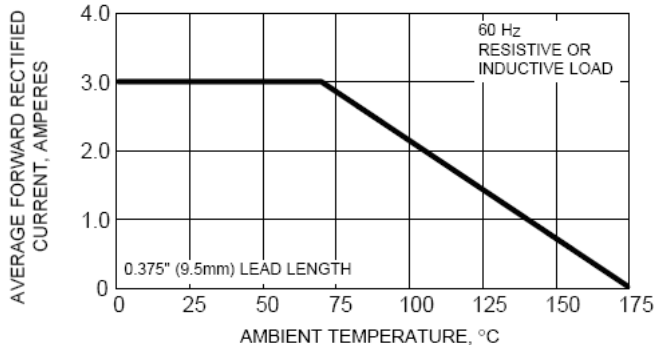


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

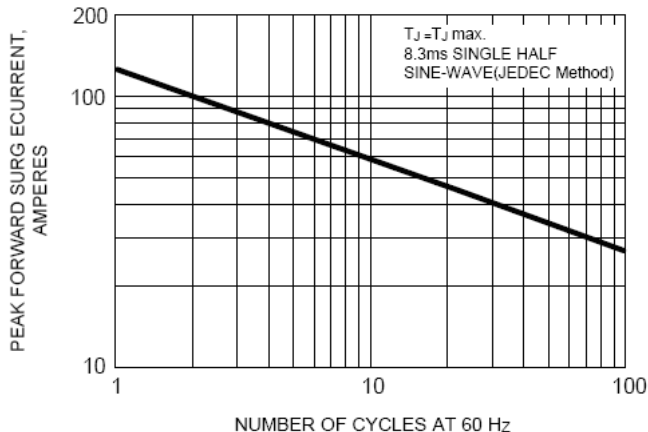


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

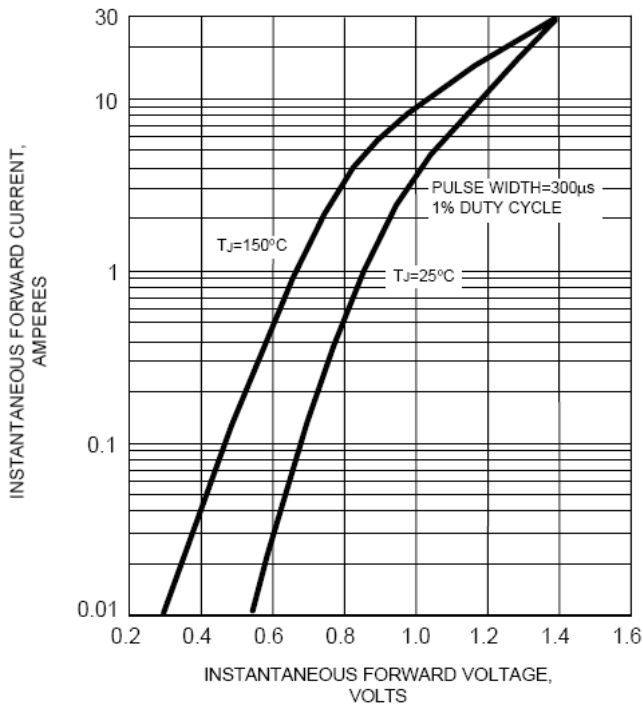


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

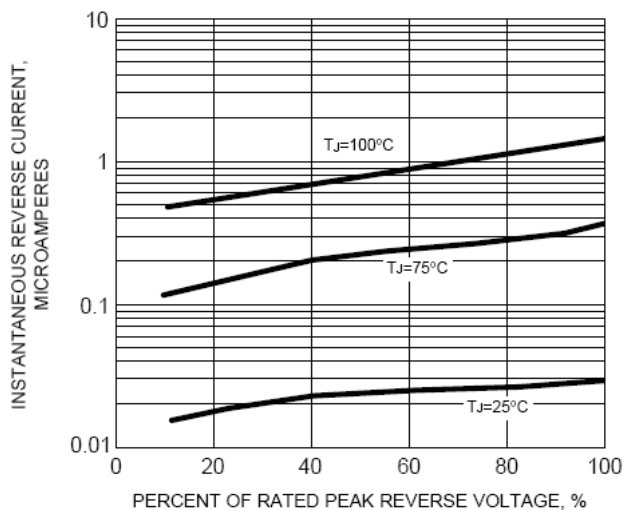


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

