

# GUFB30M

## SINTERED GLASS JUNCTION PLASTIC RECTIFIER

VOLTAGE: 1000V

CURRENT: 3.0A

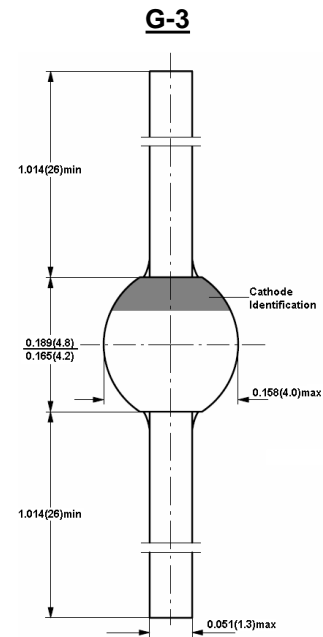


### FEATURE

High temperature metallurgically bonded construction  
Sintered glass cavity free junction  
Capability of meeting environmental standard of MIL-S-19500  
High temperature soldering guaranteed  
350°C /10sec/0.375"lead length at 5 lbs tension  
Operate at Ta =55°C with no thermal run away  
Typical Ir<0.1µA

### MECHANICAL DATA

Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C  
Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy  
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%)

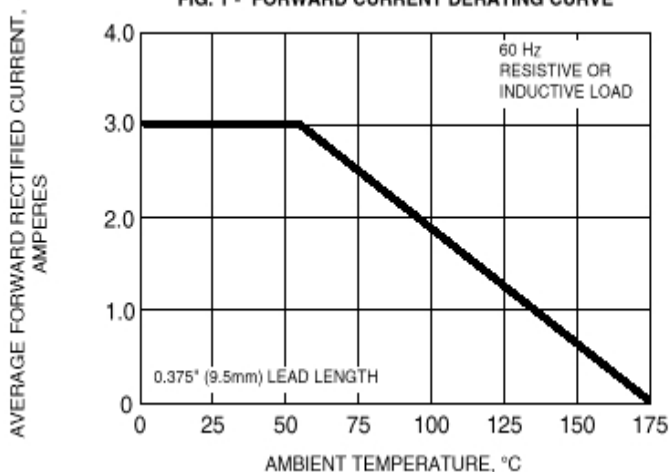
	SYMBOL	GUFB30M	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	1000	V
Maximum RMS Voltage	Vrms	700	V
Maximum DC blocking Voltage	Vdc	1000	V
Maximum Average Forward Rectified Current 3/8"lead length at Ta =55°C	If(av)	3.0	A
Peak Forward Surge Current 8.3ms single Half sine-wave superimposed on rated load	I fsm	80.0	A
Maximum Instantaneous Forward Voltage at 9.0A	Vf	1.70	V
Maximum DC Reverse Current at rated DC blocking voltage Ta =25°C Ta =150°C	Ir	10.0 100.0	µA
Maximum Reverse Recovery Time (Note 1)	Trr	75	nS
Typical Junction Capacitance (Note 2)	Cj	40.0	pF
Typical Thermal Resistance (Note 3)	Rth(ja)	20.0	°C /W
Storage and Operating Junction Temperature	Tstg, Tj	-65 to +175	°C

Note:

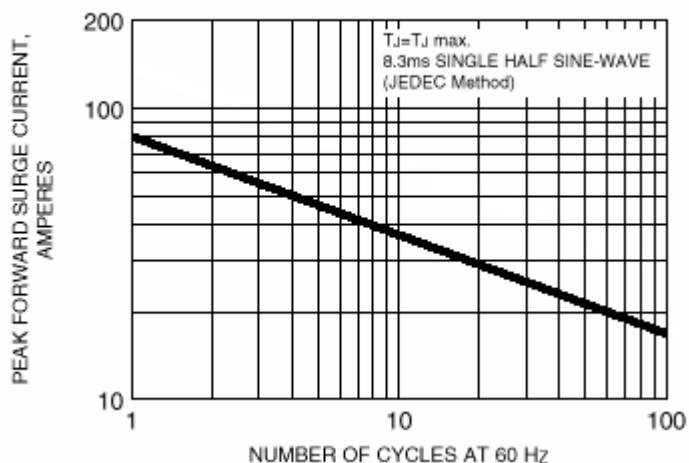
1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

# RATINGS AND CHARACTERISTIC CURVES GUFB30M

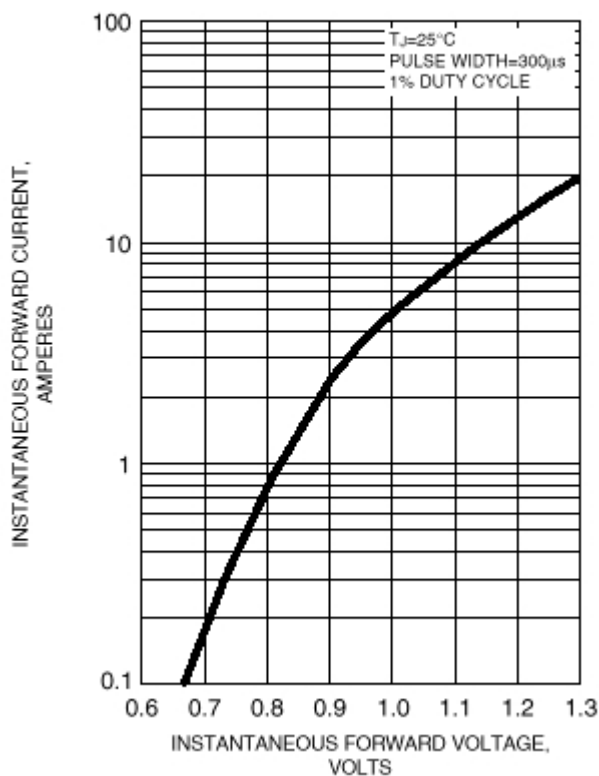
**FIG. 1 - FORWARD CURRENT DERATING CURVE**



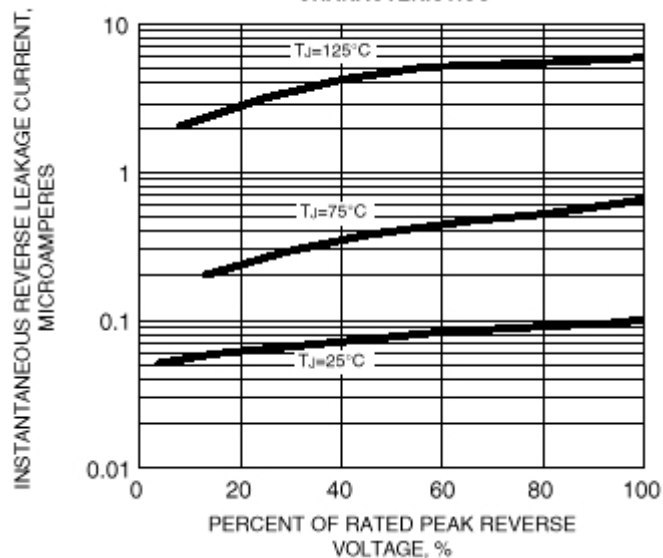
**FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG. 4 - TYPICAL REVERSE CHARACTERISTICS**



**FIG. 5 - TYPICAL JUNCTION CAPACITANCE**

