

GUFB30M

SINTERED GLASS JUNCTION PLASTIC RECTIFIER

VOLTAGE: 1000V

CURRENT: 3.0A

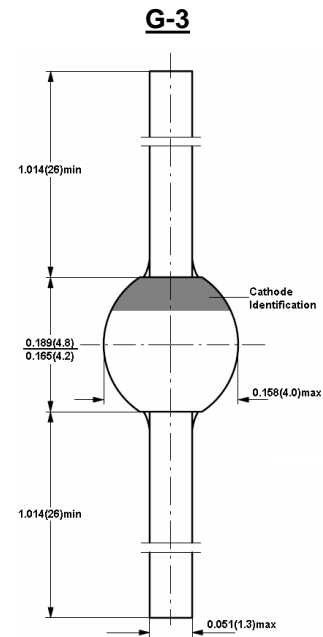


FEATURE

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 $T_a = 55^\circ\text{C}$ with no thermal run away
Typical $I_r < 0.1\mu\text{A}$

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	V _{rrm}	1000	V
Maximum RMS Voltage	V _{rms}	700	V
Maximum DC blocking Voltage	V _{dc}	1000	V
Maximum Average Forward Rectified Current 3/8"lead length at $T_a = 55^\circ\text{C}$	I _{f(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	V _f	1.70	V
Maximum DC Reverse Current at rated DC blocking voltage $T_a = 25^\circ\text{C}$ $T_a = 150^\circ\text{C}$	I _r	10.0 100.0	μA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	75	nS
Typical Junction Capacitance (Note 2)	C _j	40.0	pF
Typical Thermal Resistance (Note 3)	R _{th(ja)}	20.0	$^\circ\text{C}/\text{W}$
Storage and Operating Junction Temperature	T _{stg} , T _j	-65 to +175	$^\circ\text{C}$

Note:

1. Reverse Recovery Condition I_f =0.5A, I_r =1.0A, I_{rr} =0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V_{dc}
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

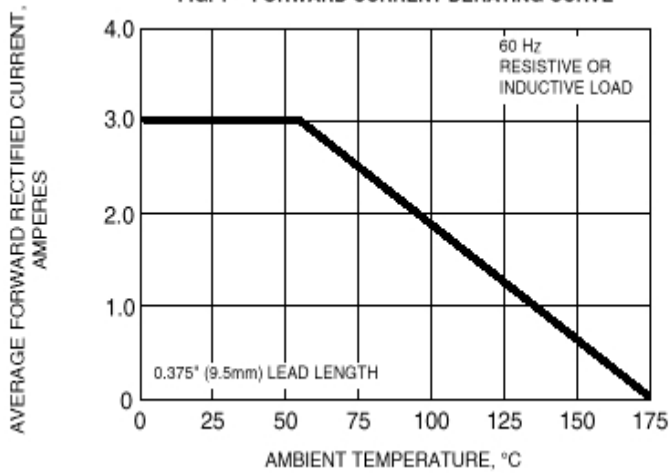


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

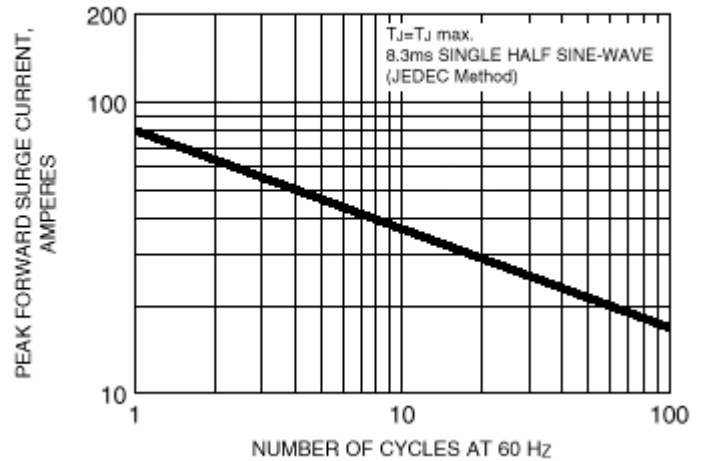


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

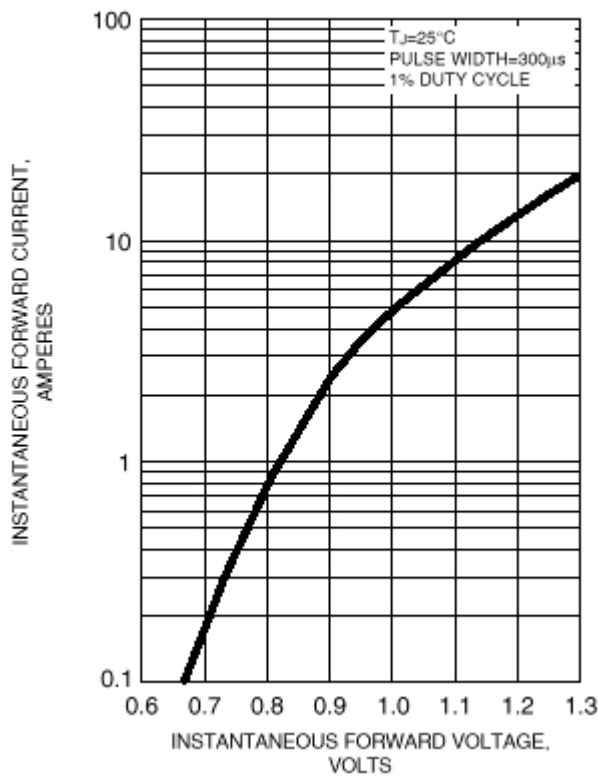


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

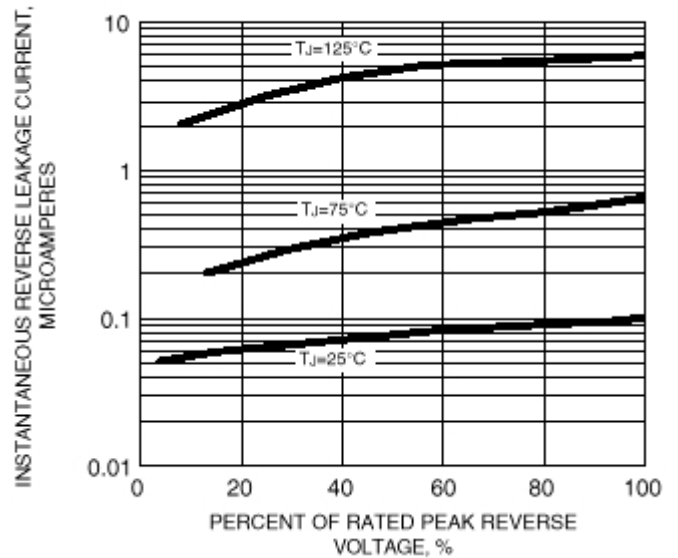


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

