

GPB30ME

SINTERED GLASS JUNCTION PLASTIC RECTIFIER

VOLTAGE: 1000V

CURRENT: 3.0A

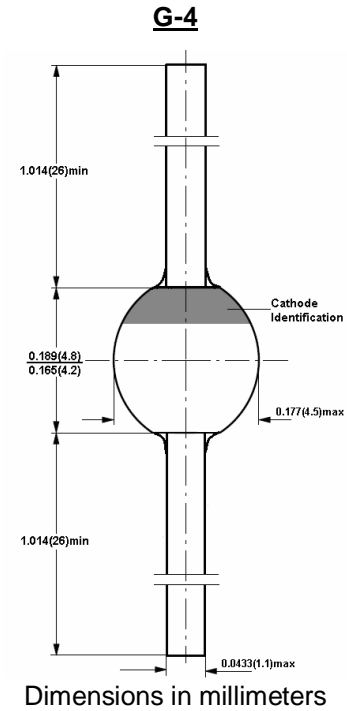


FEATURE

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



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	GPB30ME	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 Ta =55°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	1.2	V
Maximum Full Load Reverse Current Full Cycle Average at 55°C	I _{r(av)}	100.0	µA
Maximum DC Reverse Current at rated DC blocking voltage	I _r	1.0 100.0	µA
Typical Reverse Recovery Time (Note 1)	T _{rr}	2.0	µS
Typical Junction Capacitance (Note 2)	C _j	40.0	pF
Typical Thermal Resistance (Note 3)	R _{th(ja)}	20.0	°C /W
Storage and Operating Junction Temperature	T _{stg} , T _j	-65 to +175	°C

Note:

- Reverse Recovery Condition I_f =0.5A, I_r =1.0A, I_{rr} =0.25A
- Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

RATINGS AND CHARACTERISTIC CURVES GPB30ME

FIG. 1 - FORWARD CURRENT DERATING CURVE

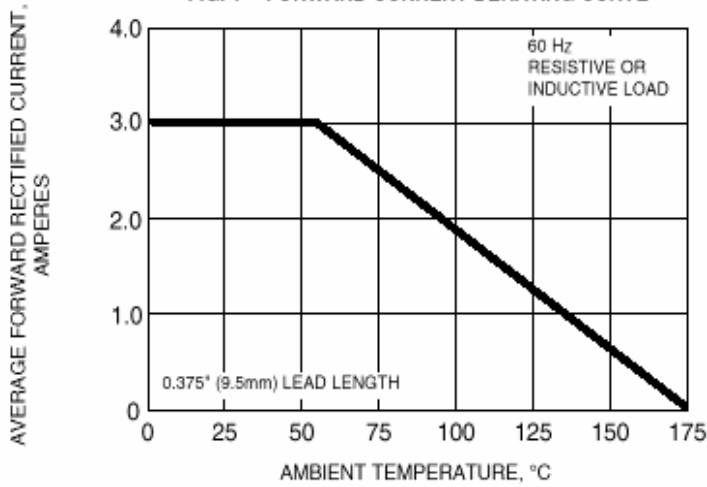


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

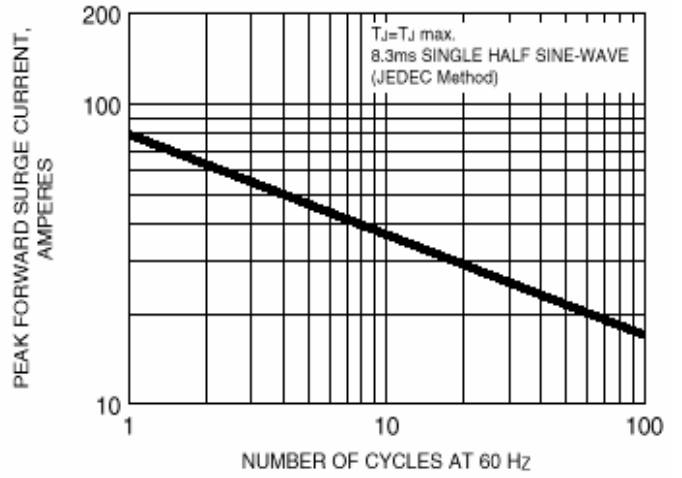


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

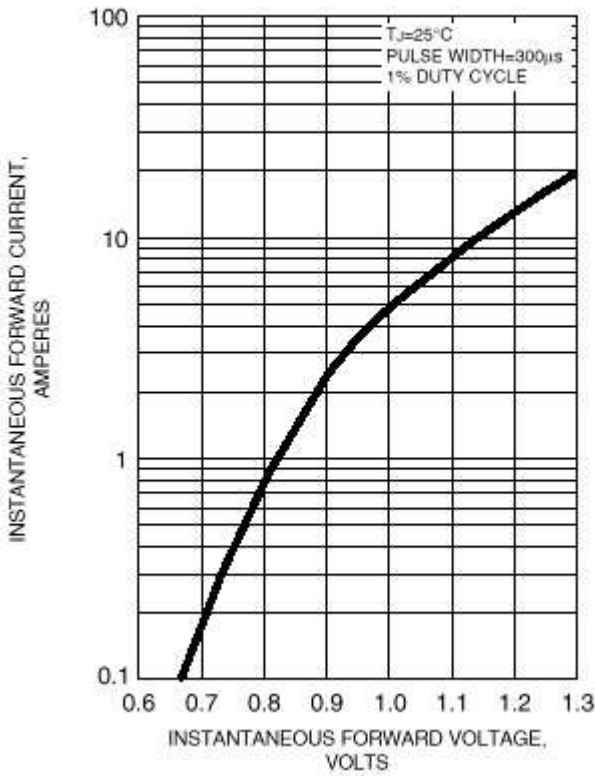


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

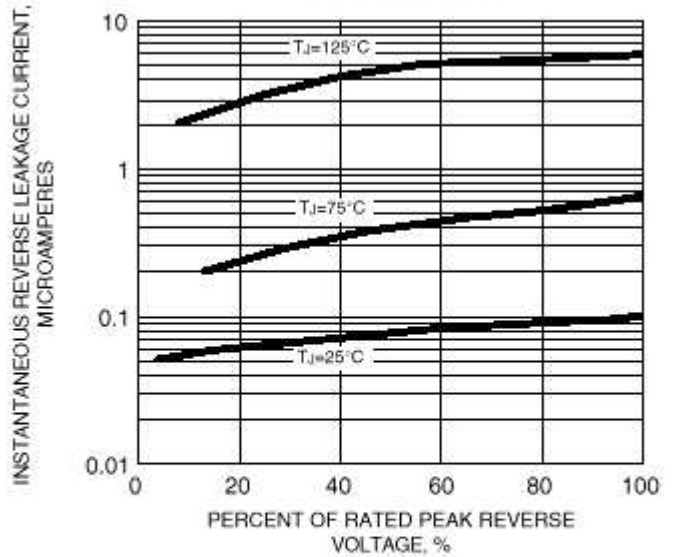


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

