RGPB30J

SINTERED GLASS JUNCTION
FAST SWITCHING PLASTIC RECTIFIER
VOLTAGE:600V **CURRENT: 3.0A**

GULF SBMI

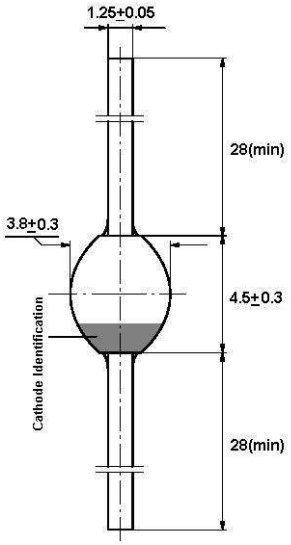
FEATURE

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

PACKAGE



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	RGPB30J	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	600	V
Maximum RMS Voltage	Vrms	420	V
Maximum DC blocking Voltage	Vdc	600	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	Ifsm	125	A
Maximum Forward Voltage at rated Forward Current and 25°C IF=3A	Vf	1.1	V
Maximum full load reverse current full cycle average at 55°C Ambient	Ir(av)	100	μA
Maximum DC Reverse Current Ta =25°C	Ir	5.0	μA
at rated DC blocking voltage Ta =150°C		100	μA
Maximum Reverse Recovery Time (Note 1)	Trr	150	nS
Typical Junction Capacitance (Note 2)	Cj	60	pF
Typical Thermal Resistance (Note 3)	R(ja)	20	°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 RGPB30J

FIG. 1 - FORWARD CURRENT DERATING CURVE

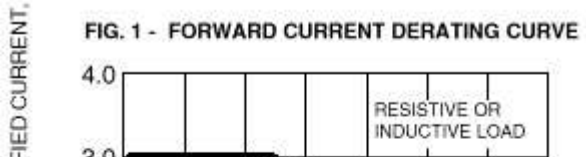


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

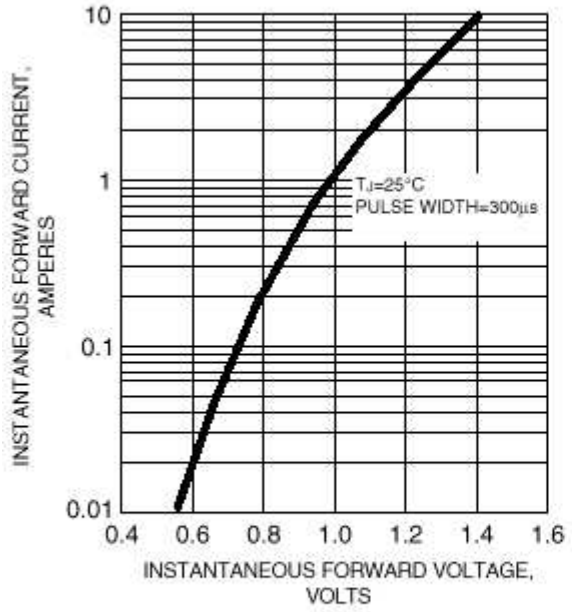


FIG. 4 - TYPICAL REVERSE CHARACTERISTIC

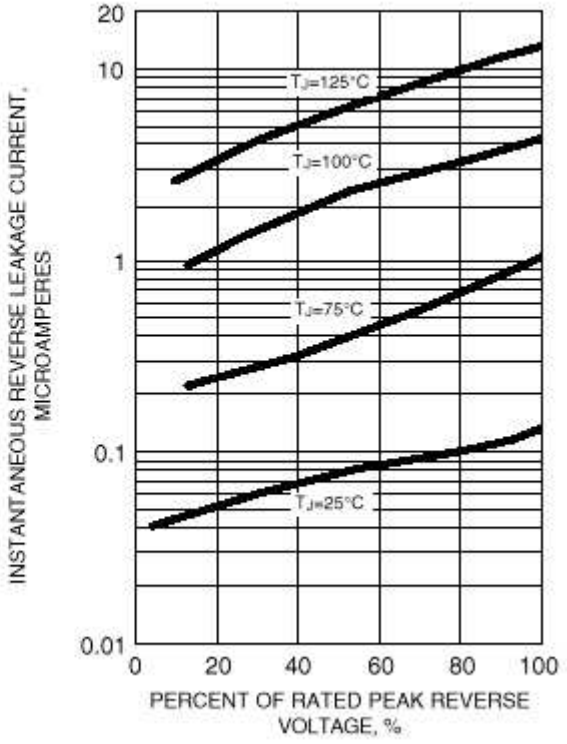


FIG. 5 - TYPICAL JUNCTION CAPACITANCE