

GP20A THRU GP20M

SINTERED GLASS JUNCTION PLASTIC RECTIFIER

VOLTAGE: 50 TO 1000V

CURRENT: 2.0A



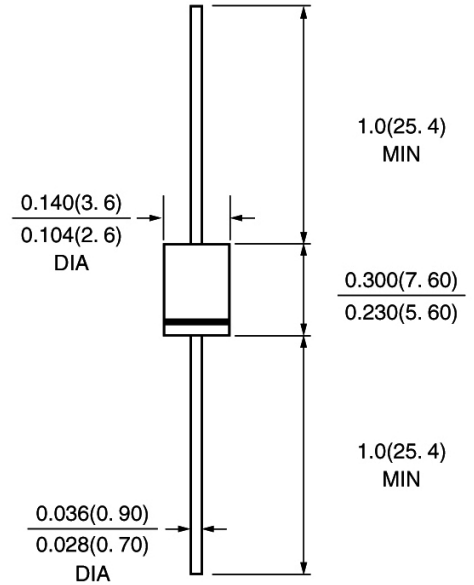
FEATURE

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

DO-15\DO-204AC



Dimensions in inches and (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	GP 20A	GP 20B	GP 20D	GP 20G	GP 20J	GP 20K	GP 20M	unit s
	Maximum Recurrent Peak Reverse Voltage	Vrrm	50	100	200	400	600	800	1000	V
	Maximum RMS Voltage	Vrms	35	70	140	280	420	560	700	V
	Maximum DC blocking Voltage	Vdc	50	100	200	400	600	800	1000	V
	Maximum Average Forward Rectified Current 3/8"lead length at Ta =55°C	If(av)	2.0							A
	Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	65.0							A
	Maximum Instantaneous Forward Voltage at 2.0A	Vf	1.2			1.1				V
	Maximum full load reverse current full cycle Average at 55°C	Ir(av)	100.0							µA
	Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage	Ir	5.0							µA
	Typical Reverse Recovery Time (Note 1)	Trr	2.5							µS
	Typical Junction Capacitance (Note 2)	Cj	40.0							PF
	Typical Thermal Resistance (Note 3)	R(ja)	25.0							°C /W
	Storage and Operating Junction Temperature	Tstg, Tj	-65 to +175							°C

Note:

- Reverse Recovery Condition $I_f = 0.5\text{A}$, $I_r = 1.0\text{A}$, $I_{rr} = 0.25\text{A}$
- 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 GP20A THRU GP20M

FIG. 1 - FORWARD CURRENT DERATING CURVE

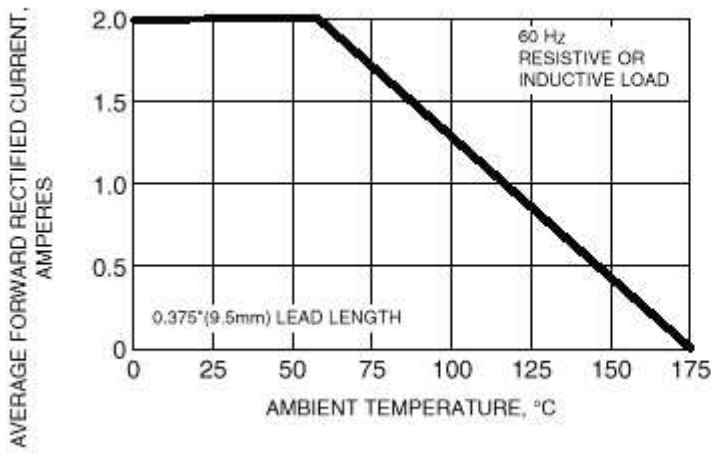


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

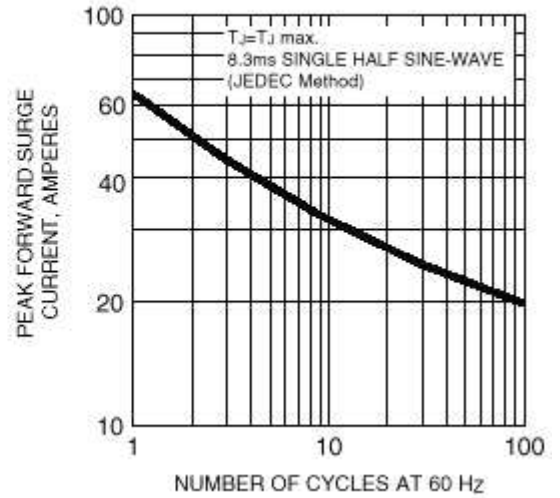


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

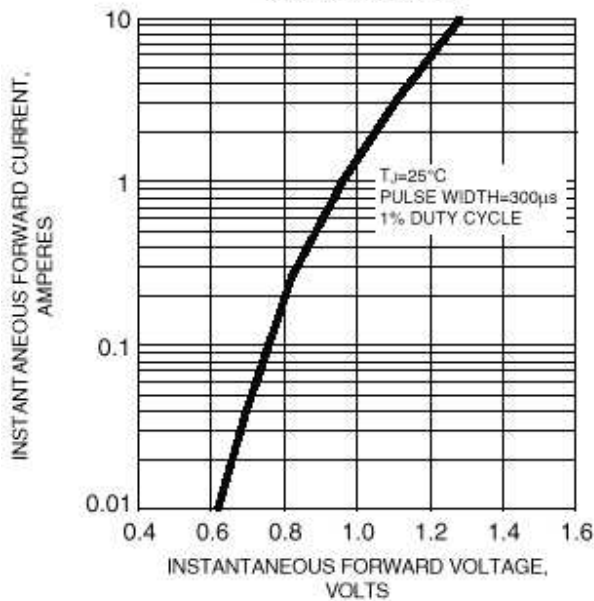
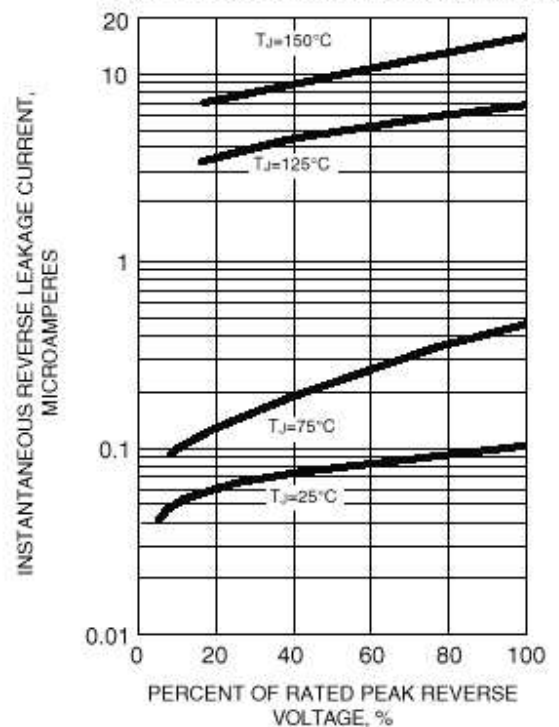


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



1 Rev.A4

FIG. 5 - TYPICAL JUNCTION CAPACITANCE

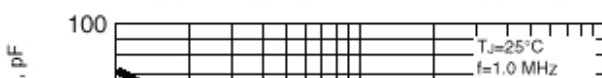
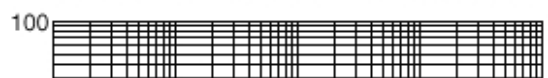


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

ICE, °C/W



www.gulfsemi.com