

GP20A THRU GP20M

SINTERED GLASS JUNCTION PLASTIC RECTIFIER

VOLTAGE:50 TO 1000V

CURRENT: 2.0A

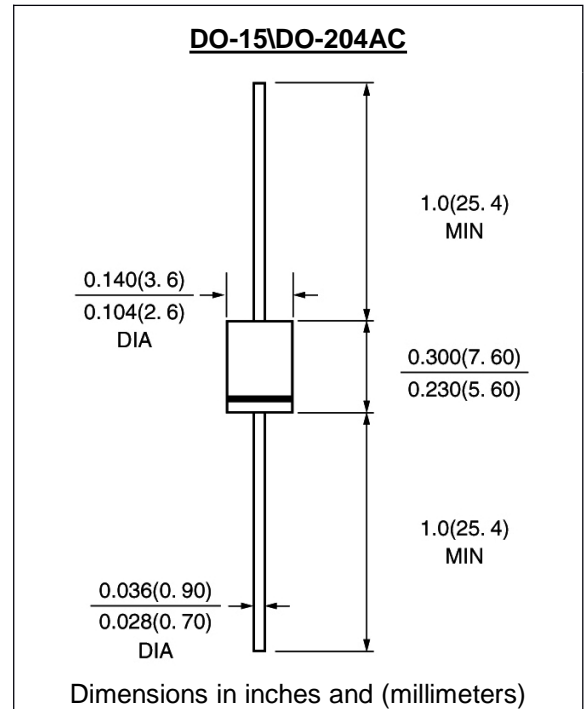


FEATURE

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 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	GP 20A	GP 20B	GP 20D	GP 20G	GP 20J	GP 20K	GP 20M	unit
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{rms}	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	V _{dc}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 3/8"lead length at Ta =55°C	I _{f(av)}	2.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	65.0							A
Maximum Instantaneous Forward Voltage at 2.0A	V _f	1.2			1.1			V	
Maximum full load reverse current full cycle Average at 55°C	I _{r(av)}	100.0							µA
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage	I _r	5.0							µA
Typical Reverse Recovery Time (Note 1)	T _{rr}	2.5							µS
Typical Junction Capacitance (Note 2)	C _j	40.0							PF
Typical Thermal Resistance (Note 3)	R(ja)	25.0							°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 GP20A THRU GP20M

FIG. 1 - FORWARD CURRENT DERATING CURVE

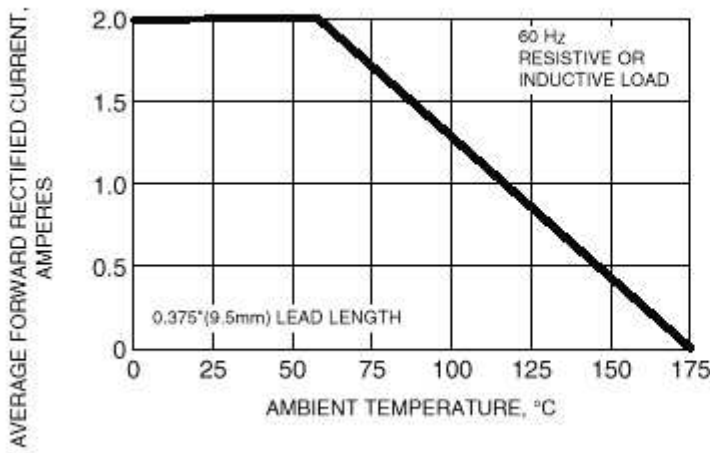


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

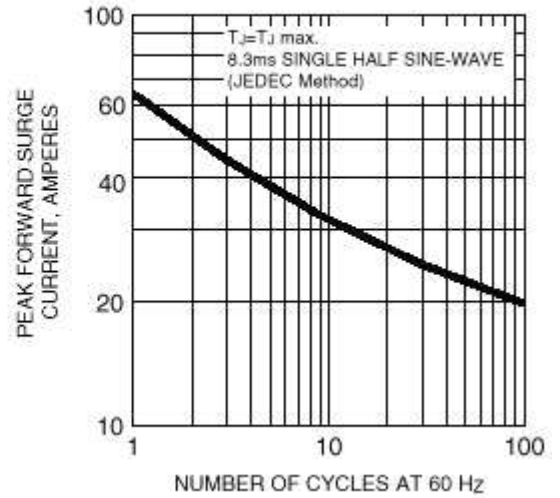


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

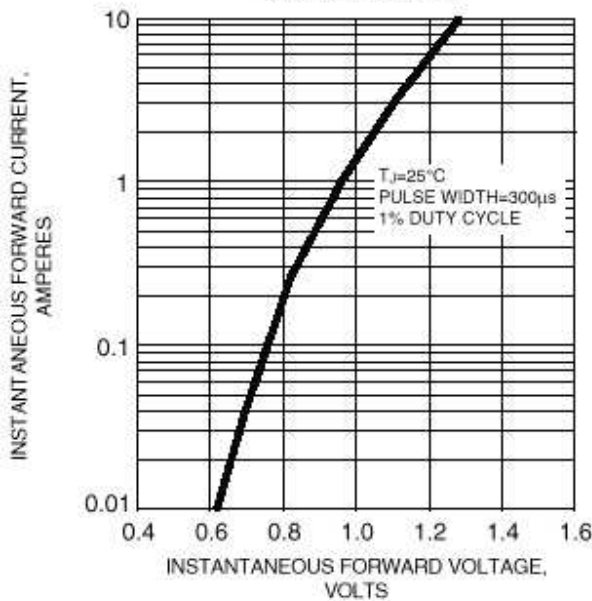
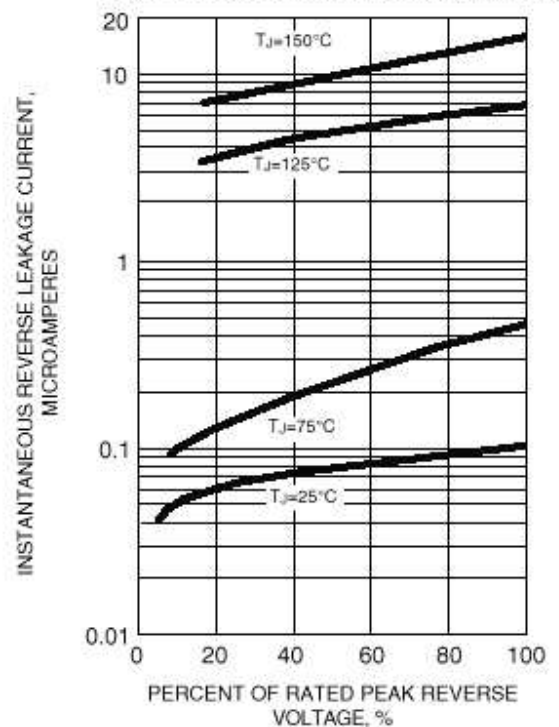


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



1 Rev.A4

FIG. 5 - TYPICAL JUNCTION CAPACITANCE



FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE



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