GP30N THRU GP30Y

SINTERED GLASS JUNCTION PLASTIC RECTIFIER

VOLTAGE:1100V to 1600V **CURRENT: 3.0A**

GULF SEMI

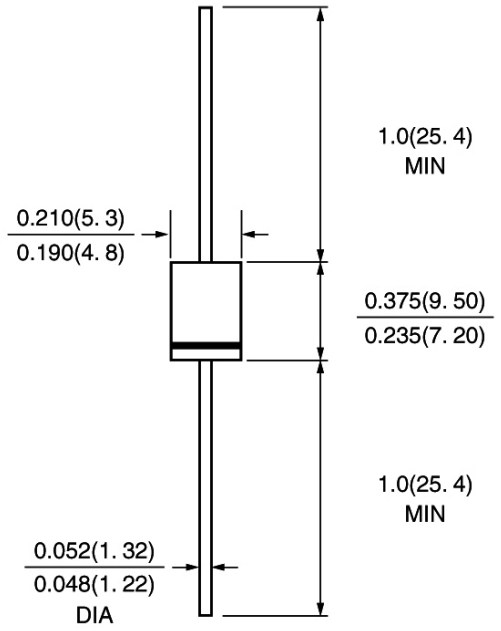
FEATURE

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

DO-201AD



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 30N	GP 30Q	GP 30T	GP 30V	GP 30W	GP 30Y	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	1100	1200	1300	1400	1500	1600	V
Maximum RMS Voltage	Vrms	770	840	910	980	1050	1120	V
Maximum DC blocking Voltage	Vdc	1100	1200	1300	1400	1500	1600	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	125.0						A
Maximum Instantaneous Forward Voltage at 3.0A	Vf	1.2						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 Ta =150°C	Ir	5.0 100.0						μA μA
Typical Reverse Recovery Time (Note 1)	Trr	3.0						μS
Typical Junction Capacitance (Note 2)	Cj	40.0						pF
Typical Thermal Resistance (Note 3)	R(ja)	20.0						°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 GP30N THRU GP30Y

FIG. 1 - FORWARD CURRENT DERATING CURVE

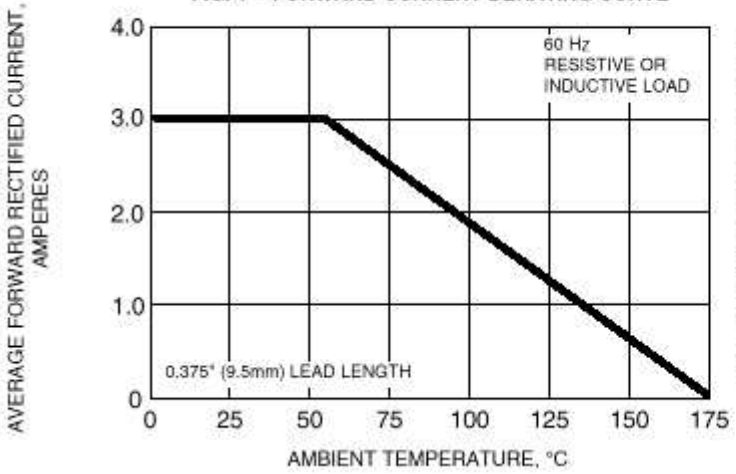


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

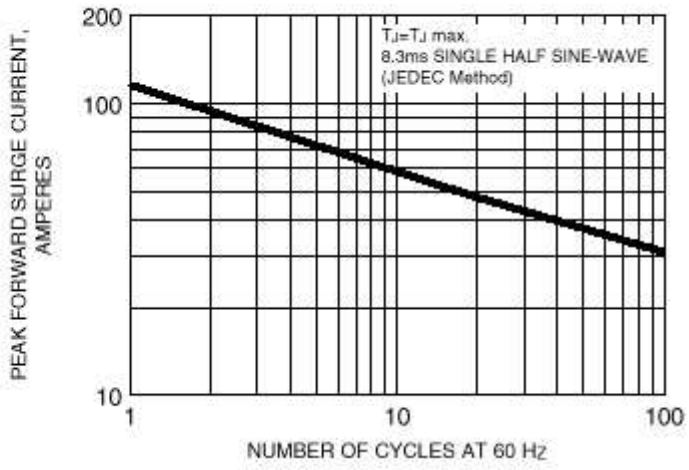


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

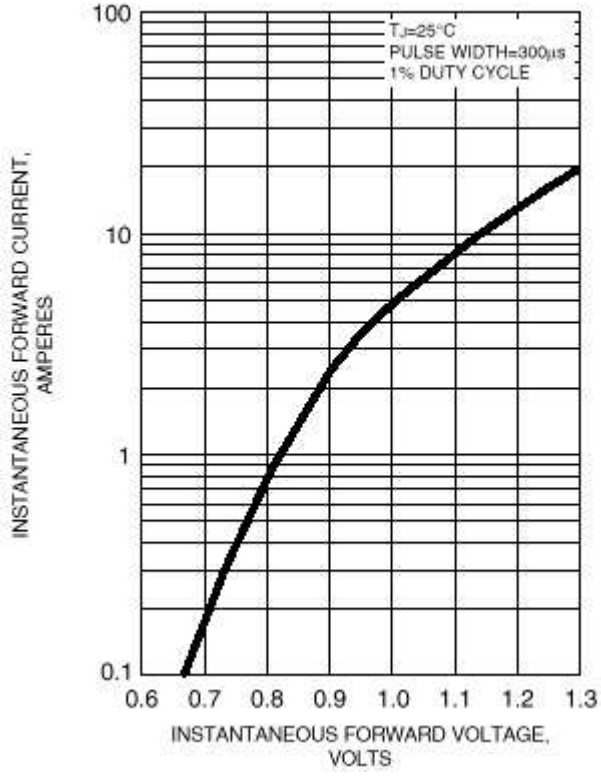


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

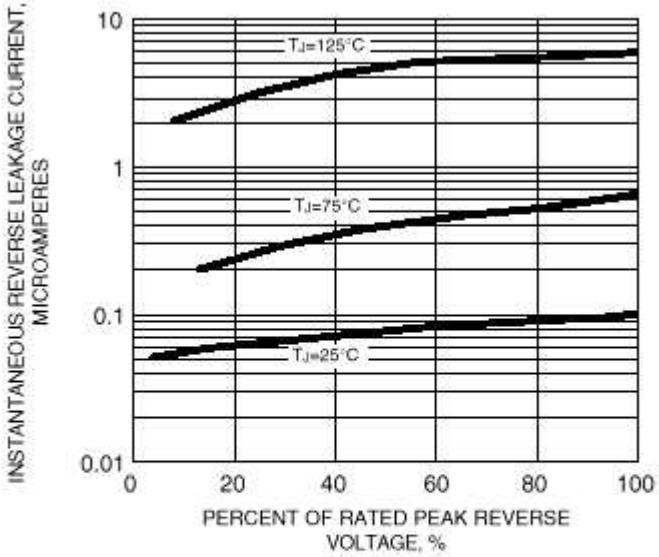


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

