

GP30N THRU GP30Y

SINTERED GLASS JUNCTION PLASTIC RECTIFIER

VOLTAGE: 1100V to 1600V

CURRENT: 3.0A

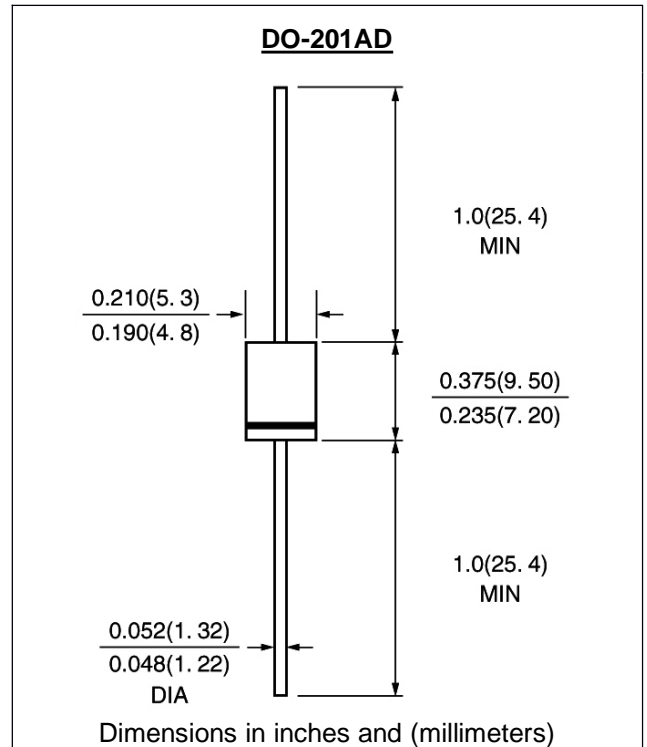


FEATURE

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	GP 30N	GP 30Q	GP 30T	GP 30V	GP 30W	GP 30Y	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	1100	1200	1300	1400	1500	1600	V
Maximum RMS Voltage	V _{rms}	770	840	910	980	1050	1120	V
Maximum DC blocking Voltage	V _{dc}	1100	1200	1300	1400	1500	1600	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}	125.0						A
Maximum Instantaneous Forward Voltage at 3.0A	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 Ta =25°C at rated DC blocking voltage Ta =150°C	I _r	5.0 100.0						µA µA
Typical Reverse Recovery Time (Note 1)	T _{rr}	3.0						µS
Typical Junction Capacitance (Note 2)	C _j	40.0						pF
Typical Thermal Resistance (Note 3)	R(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 GP30N THRU GP30Y

FIG. 1 - FORWARD CURRENT DERATING CURVE

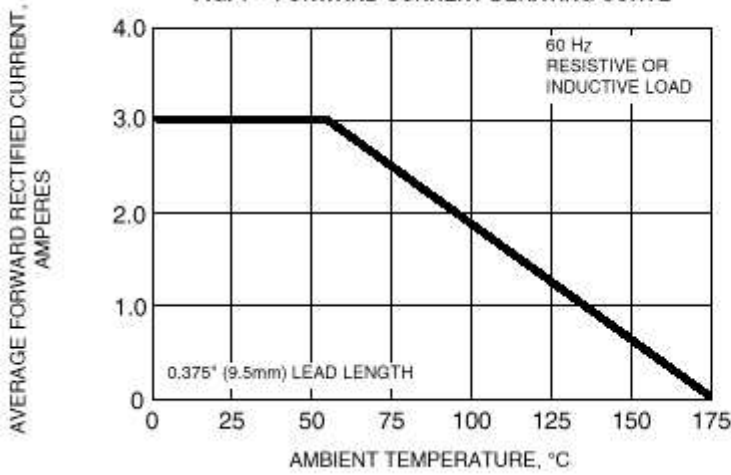


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

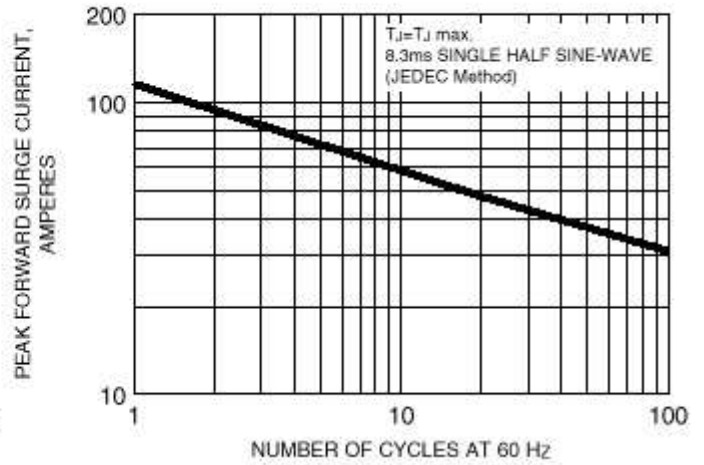


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

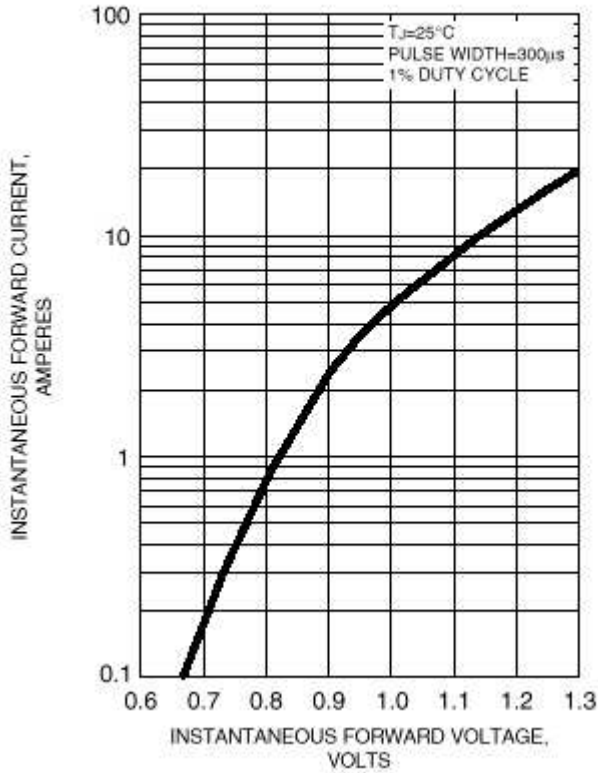


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

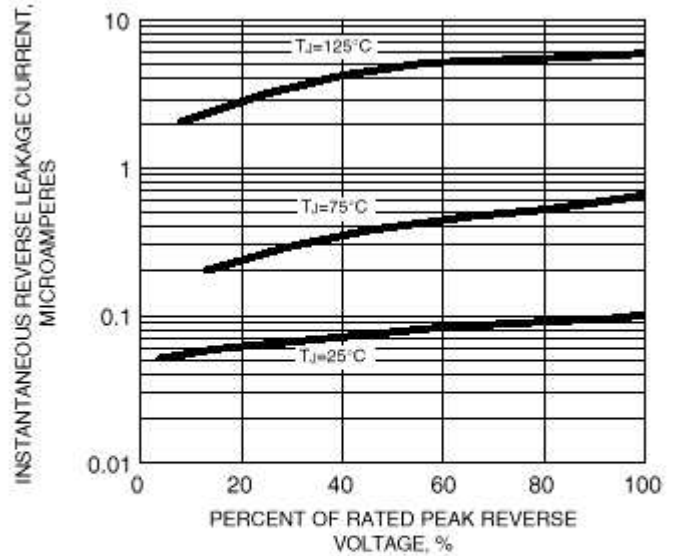


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

