

# BY228GP

## SINTERED GLASS JUNCTION PLASTIC RECTIFIER

VOLTAGE:1500V

CURRENT: 3.0A

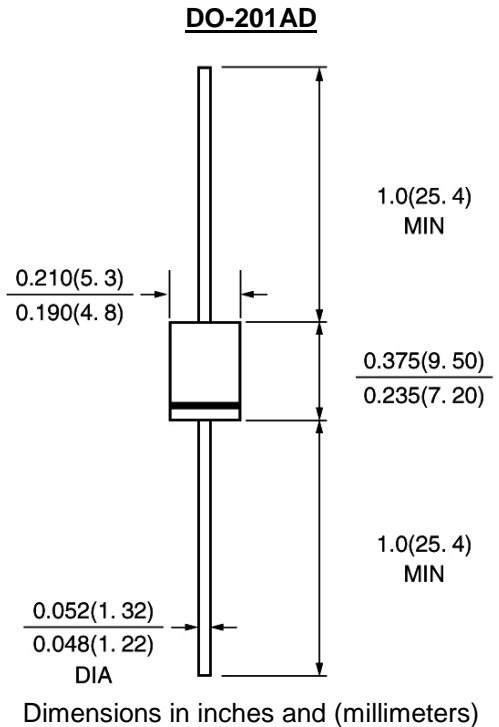


### FEATURE

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	BY228GP	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	1500	V
Maximum RMS Voltage	V <sub>rms</sub>	1050	V
Maximum DC blocking Voltage	V <sub>dc</sub>	1500	V
Maximum Average Forward Rectified Current 3/8"lead length at Ta =55°C	I <sub>f(av)</sub>	3.0	A
Peak Forward Surge Current 8.3ms single Half sine-wave superimposed on rated load	I <sub>fsm</sub>	125.0	A
Maximum Instantaneous Forward Voltage At 5.0A	V <sub>f</sub>	1.50	V
Maximum full load reverse current full cycle Average at 55°C	I <sub>r(av)</sub>	100.0	µA
Maximum DC Reverse Current at rated DC blocking voltage	I <sub>r</sub>	5.0 100.0	µA µA
Typical Reverse Recovery Time (Note 1)	T <sub>rr</sub>	1000	nS
Typical Thermal Resistance (Note 2)	R <sub>th(ja)</sub>	70.0	K/W
Storage and Operating Junction Temperature	T <sub>stg</sub> , T <sub>j</sub>	-65 to +175	°C

#### Note:

1. Reverse Recovery Condition I<sub>f</sub> =0.5A, I<sub>r</sub> =1.0A, I<sub>rr</sub> =0.25A
2. Thermal Resistance from Junction to Ambient on PC board with spacing 25mm

RATINGS AND CHARACTERISTIC CURVES BY228GP

FIG. 1 - FORWARD CURRENT DERATING CURVE

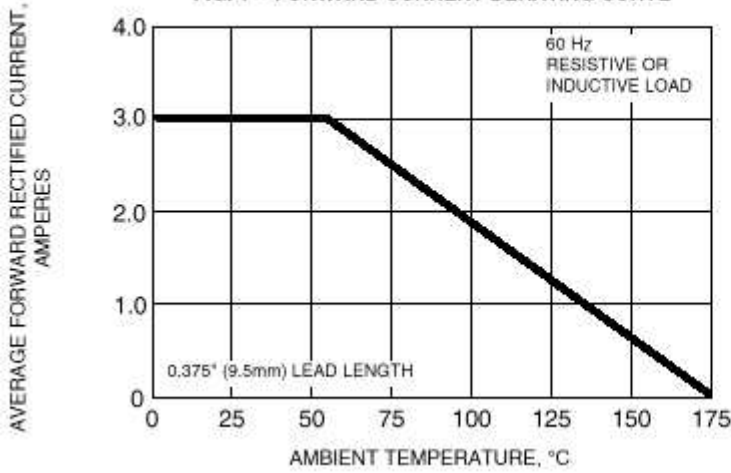


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

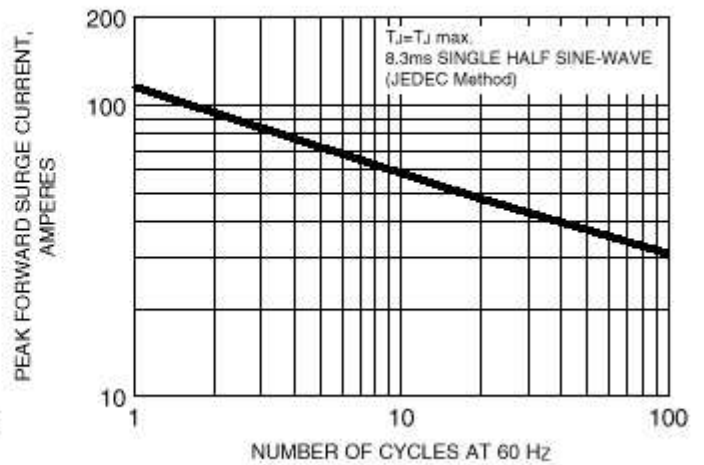


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

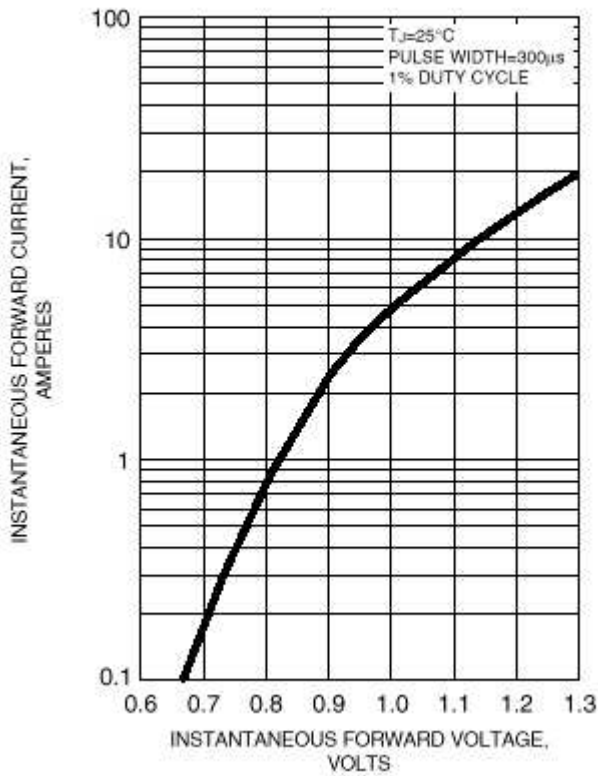


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

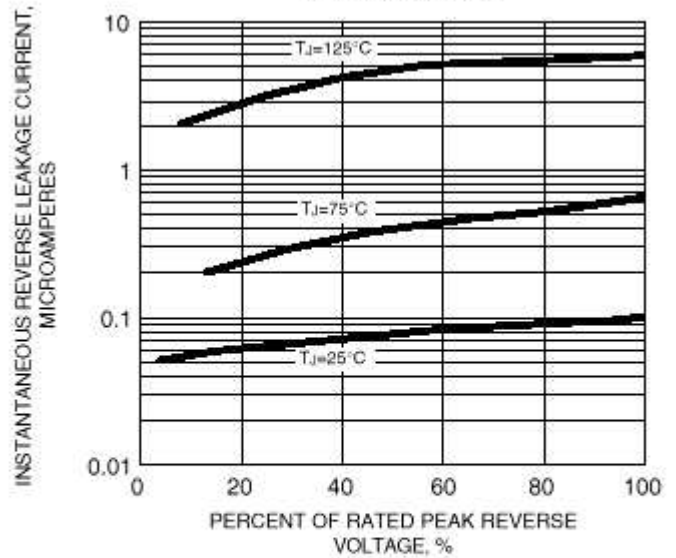


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

