

### 1N5408GR

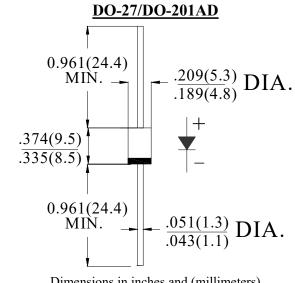
### 3.0AMPS . GLASS PASSIVATED RECTIFIERS

#### **FEATURE**

- . High current capability
- . Low forward voltage drop
- . Low power loss, high efficiency
- . High surge capability
- . High temperature soldering guaranteed: 260°C /10sec/ 0.375" lead length at 5 lbs tension

#### **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



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

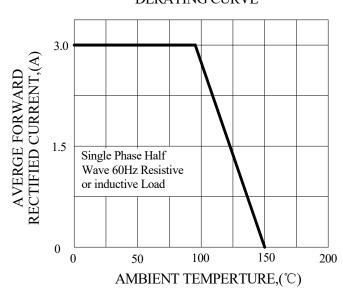
Type Number	SYM BOL	1N5408GR	units
Maximum Recurrent Peak Reverse Voltage	$V_{ m RRM}$	1000	V
Maximum RMS Voltage	$V_{ m RMS}$	700	V
Maximum DC blocking Voltage	$V_{ m DC}$	1000	V
Maximum Average Forward Rectified Current .375"(9.5mm) lead length	$I_{\mathrm{F(AV)}}$	3.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{ m FSM}$	200.0	A
Maximum Forward Voltage at 3.0A DC	$V_{\mathrm{F}}$	1.0	V
Maximum DC Reverse Current @T <sub>A</sub> =25°C at rated DC blocking voltage @T <sub>A</sub> =125°C	$I_{ m R}$	5.0 200.0	μΑ
Typical Junction Capacitance (Note 1)	$C_{ m J}$	50	pF
Typical Thermal Resistance (Note 2)	$R_{ m (JA)}$ $R_{ m (JL)}$	50 15	°C/W
Storage Temperature	$T_{ m STG}$	-55 to +150	°C
Operation Junction Temperature	$T_{ m J}$	-55 to +150	°C

#### Note:

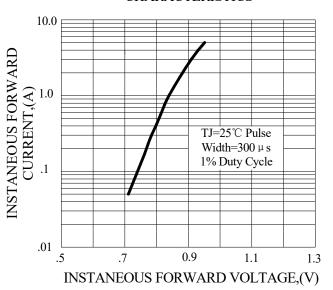
- 1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- 2. Thermal Resistance from Junction to Ambient and Lead at 0.375" (9.5mm) lead length, vertical P.C. Board Mounted.

### RATING AND CHARACTERISTIC CURVES

# FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE



# FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



## FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

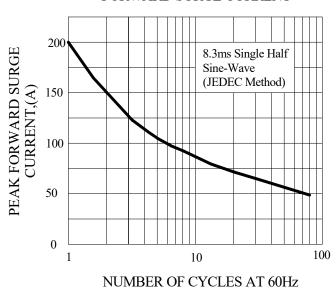
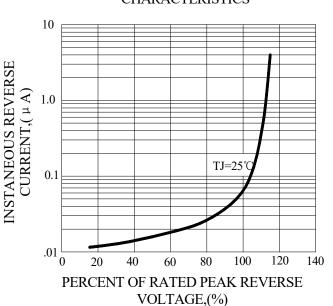


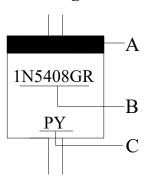
FIG.4-TYPICAL REVERSE CHARACTERISTICS





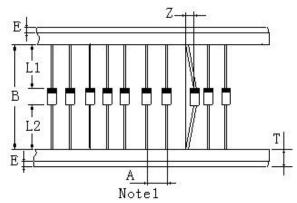
## Marking and packaging illustration

## 1. Marking



SYMBOL	Explanation
A	<b>Color Band Denotes Cathode</b>
В	Product Name
C	Trademark

## 2. Packaging



ITEM	SYMBOL	SPECIFICATIONS	SPECIFICATIONS
		(mm)	(inch)
Component alignment	Z	1.2max	0.048max
Tape width	T	6.0±0.4	0.236±0.016
Exposed adhesive	Е	0.8max	0.032max
Body eccentricity	L1-L2	1.0max	0.040max
Component	A	10.0±0.5	$0.4 \pm 0.02$
Inner tap	В	52.0~53.5	2.05~2.11

NOTE:

Each component lead shall be sandwiched between tapes for a minimum of 2.5mm (0.1inch)