

# 1N5400 THRU 1N5408

## 3.0 AMPS. Silicon Rectifiers

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Voltage Range 50 to 1000 Volts Current 3.0Amperes

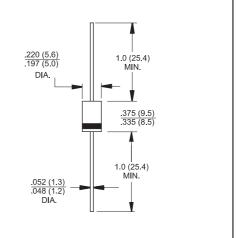
**DO-201AD** 

#### **Features**

- ♦ Low forward voltage drop
- → High current capability
- ♦ High reliability
- High surge current capability

#### **Mechanical Data**

- ♦ Cases: Molded plastic
- ♦ Epoxy: UL 94V-O rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
- ♦ Polarity: Color band denotes cathode end
- High temperature soldering guaranteed: 260°C/10 seconds/.375",(9.5mm) lead lengths at 5 lbs., (2.3kg) tension
- ♦ Weight: 1.2 grams



Dimensions in inches and (millimeters)

### **Maximum Ratings and Electrical Characteristics**

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

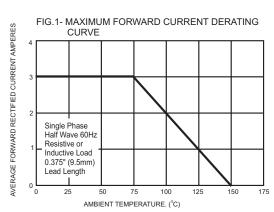
Type Number	Symbol	1N 5400	1N 5401	1N 5402	1N 5404	1N 5406	1N 5407	1N 5408	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375 (9.5mm) Lead Length $@T_A = 75^{\circ}C$	I <sub>(AV)</sub>	3.0							Α
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I <sub>FSM</sub>	200							Α
Maximum Instantaneous Forward Voltage @ 3.0A	$V_{F}$	1.0							V
Maximum DC Reverse Current @ $T_A=25^{\circ}$ C at Rated DC Blocking Voltage @ $T_A=100^{\circ}$ C	I <sub>R</sub>	5.0 100							uA uA
Maximum Full Load Reverse Current, Full Cycle Average .375"(9.5mm) Lead Length @ $T_L$ =75 $^{\circ}$ C	HT <sub>IR</sub>	30							uA
Typical Junction Capacitance (Note 1)	Cj	50							pF
Typical Thermal Resistance ( Note 2 )	$R\theta_{JA}$	40							€\M
Operating Temperature Range	TJ	-65 to +150							${\mathbb C}$
Storage Temperature Range	T <sub>STG</sub>	-65 to +150							${\mathbb C}$

Notes: 1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.

2. Mount on Cu-Pad Size 16mm x 16mm on P.C.B.







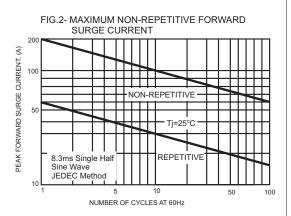


FIG.3- TYPICAL FORWARD CHARACTERISTICS

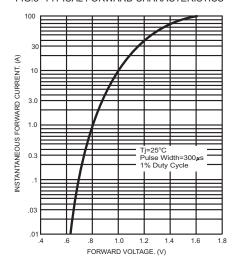


FIG.4- TYPICAL JUNCTION CAPACITANCE

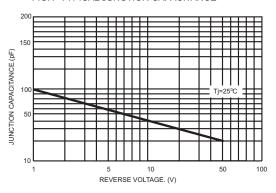


FIG.5- TYPICAL REVERSE CHARACTERISTICS

