

## 1N5400 THRU 1N5408

### 3.0 AMPS. Silicon Rectifiers

#### Features

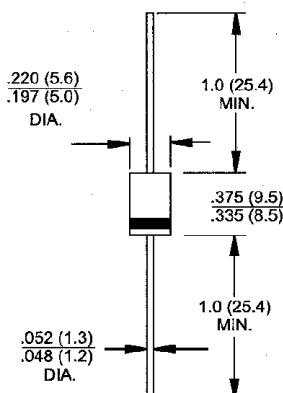
- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

#### 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: 250°C/10 seconds/.375" (9.5mm) lead lengths at 5 lbs., (2.3kg) tension
- Weight: 1.2 grams

Voltage Range  
50 to 1000 Volts  
Current  
3.0Amperes

#### DO-201AD



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.

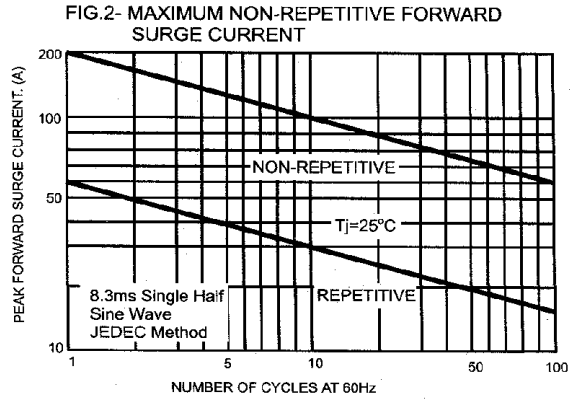
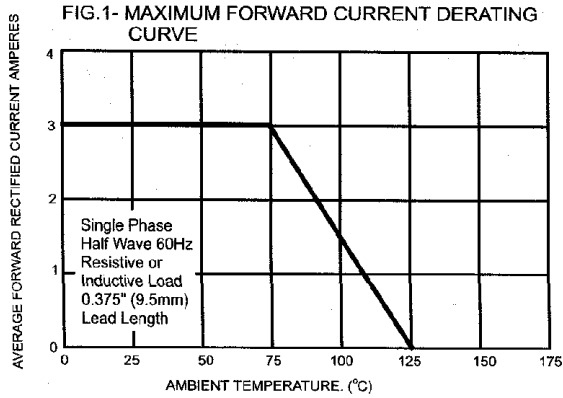
For capacitive load, derate current by 20%

Symbols	1N5400	1N5401	1N5402	1N5404	1N5406	1N5407	1N5408	Units
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375 (9.5mm) Lead Length @ T <sub>A</sub> = 75°C	3.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method )	200							A
Maximum Instantaneous Forward Voltage @ 3.0A	1.0							V
Maximum DC Reverse Current @ T <sub>A</sub> =25°C at Rated DC Blocking Voltage @ T <sub>A</sub> =100°C	5.0 100							uA uA
Maximum Full Load Reverse Current, Full Cycle Average .375" (9.5mm) Lead Length @ T <sub>L</sub> =75°C	30							uA
Typical Junction Capacitance ( Note 1 )	50							pF
Typical Thermal Resistance R <sub>θJA</sub> ( Note 2 )	18							°C/W
Operating Temperature Range T <sub>J</sub>	-65 to +125							°C
Storage Temperature Range T <sub>STG</sub>	-65 to +150							°C

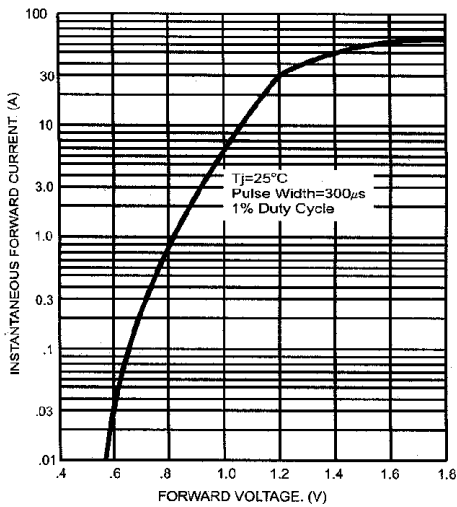
Notes: 1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.

2. Thermal Resistance from Junction to Ambient .375" (9.5mm) Lead Length.

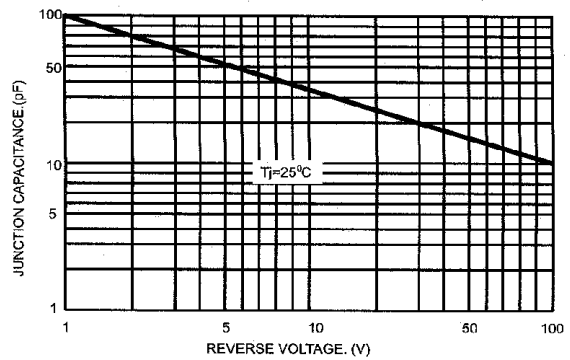
## RATINGS AND CHARACTERISTIC CURVES (1N5400 THRU 1N5408)



**FIG. 3- TYPICAL FORWARD CHARACTERISTICS**



**FIG. 4- TYPICAL JUNCTION CAPACITANCE**



**FIG. 5- TYPICAL REVERSE CHARACTERISTICS**

