

# 1N5400 THRU 1N5408

## HIGH CURRENT PLASTIC SILICON RECTIFIER

VOLTAGE - 50 to 1000 Volts CURRENT - 3.0 Amperes

### FEATURES

- High current capability
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound
- Exceeds environmental standards of MIL-S-19500/228
- Low leakage

### MECHANICAL DATA

Case: Molded plastic , DO-201AD

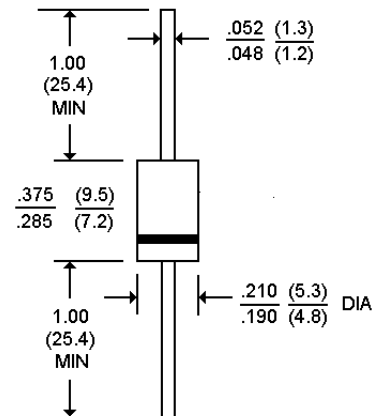
Terminals: Plated axial leads, solderable per MIL-STD-202, Method 208

Polarity: Color band denotes cathode

Mounting Position: Any

Weight: 0.04 ounce, 1.1 grams

### DO-201AD



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings 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%.

	1N5400	1N5401	1N5402	1N5403	1N5404	1N5405	1N5406	1N5407	1N5408	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	300	400	500	600	800	1000	V
Maximum RMS Voltage	35	70	140	210	280	350	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	300	400	500	600	800	1000	V
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at T <sub>A</sub> =55 °C	3.0									A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	200									A
Maximum Instantaneous Forward Voltage at 3.0A DC	1.2									V
Maximum Reverse Current T <sub>A</sub> =25 °C at Rated DC Blocking Voltage T <sub>A</sub> =100 °C	5.0 1000									µg A µg A
Maximum Full Load Reverse Current Full Cycle Average 5"(12.5mm)lead length at T <sub>L</sub> =105 °C	0.5									mA
Typical Junction capacitance (Note 1)	30									pF
Typical Thermal Resistance (Note 2) R <sub>θJKJA</sub>	20.0									°C/W
Operating and Storage Temperature Range T <sub>J</sub> ,T <sub>STG</sub>	-55 TO +150									°C

### NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
2. Thermal Resistance Junction to Ambient at 0.375"(9.5mm) lead length, P.C.B. mounted with 0.8x0.8"(20x20mm) copper heatsinks.

RATING AND CHARACTERISTIC CURVES  
1N5400 THRU 1N5408

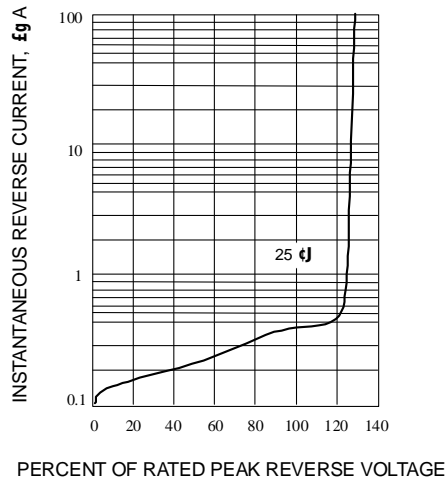


Fig. 1-TYPICAL FORWARD CHARACTERISTICS

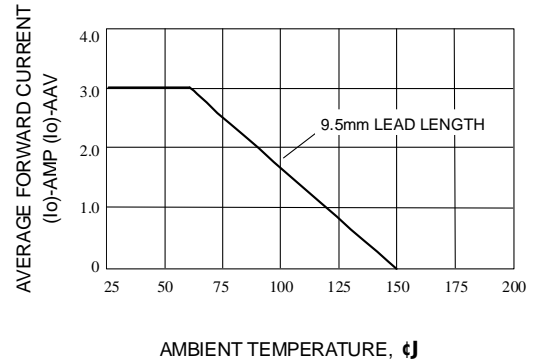


Fig. 2-PEAK FORWARD SURGE CURRENT

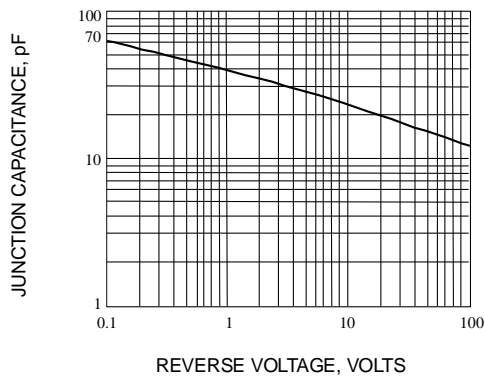


Fig. 3-TYPICAL JUNCTION CAPACITANCE

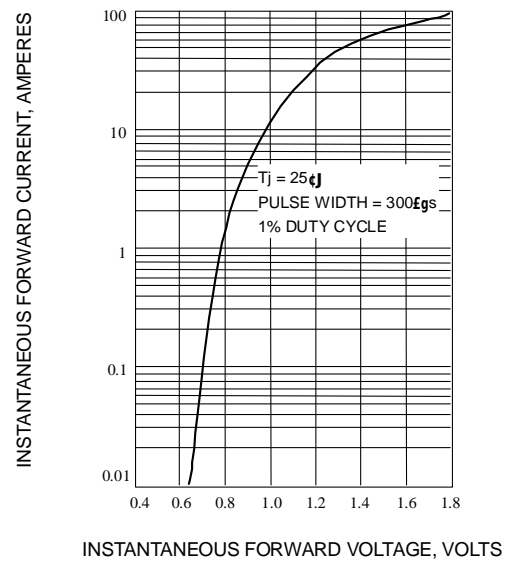


Fig. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

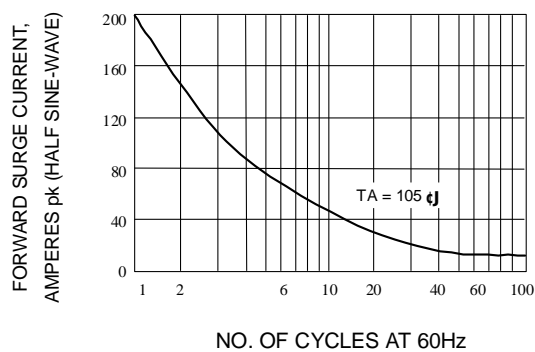


Fig. 5-MAXIMUM OVERLOAD SURGE CURRENT