

# 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

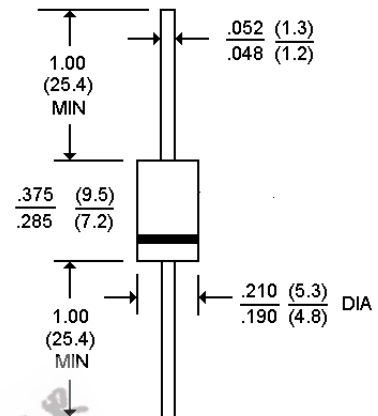
Terminals: Plated axial leads, solderable per MIL-STD-202, Method 208

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 0.8×0.8"(20×20mm) copper heatsinks.

RATING AND CHARACTERISTIC CURVES  
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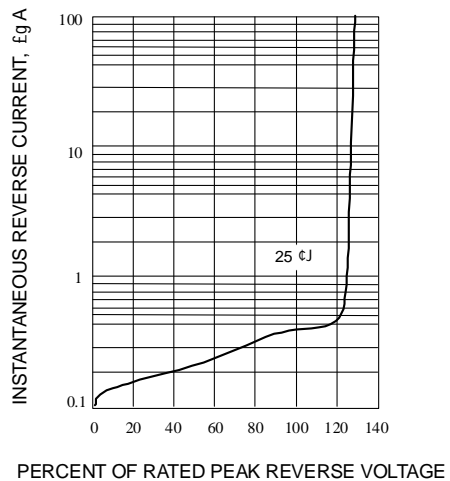


Fig. 1-TYPICAL FORWARD CHARACTERISTICS

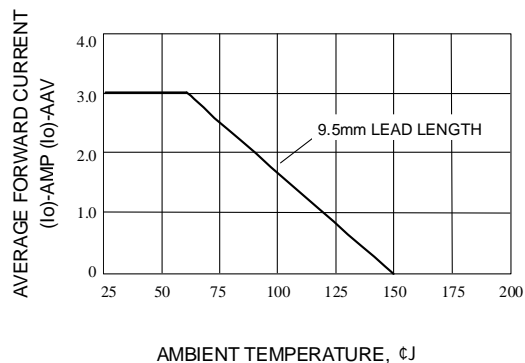


Fig. 2-PEAK FORWARD SURGE CURRENT

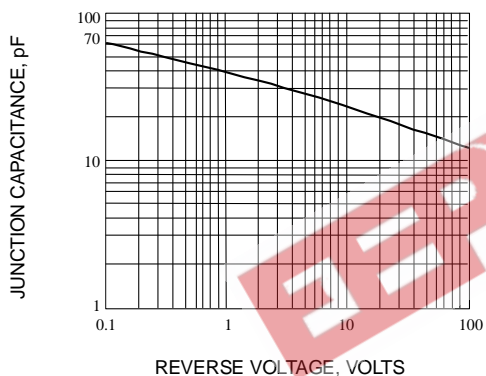


Fig. 3-TYPICAL JUNCTION CAPACITANCE

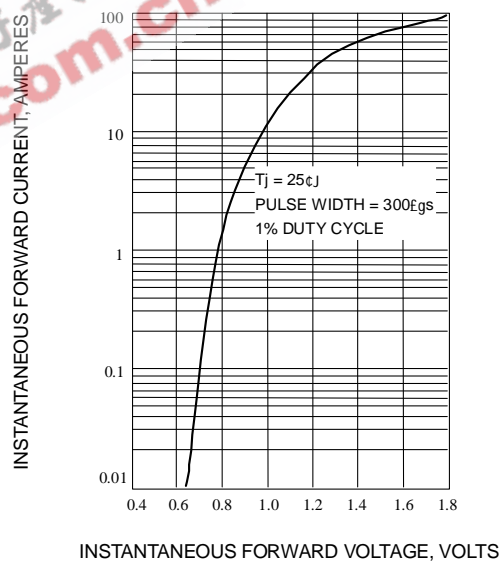


Fig. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

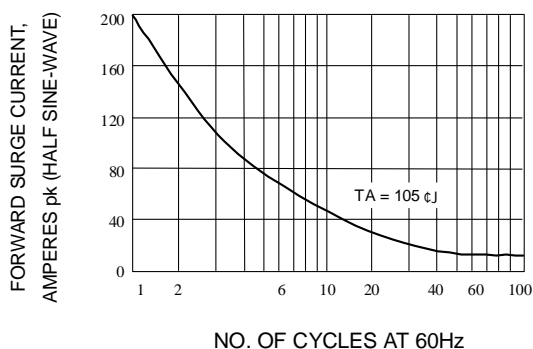


Fig. 5-MAXIMUM OVERLOAD SURGE CURRENT