

# 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

# 1.00 (25.4) MIN (25.4) (25.4) (25.4) MIN (25

**DO-201AD** 

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ¢J ambient temperature unless otherwise specified.

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

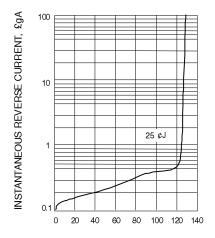
For capacitive load, derate current by 20%.

	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	3.0									Α
Current .375"(9.5mm) Lead Length at										
T <sub>A</sub> =55 ¢J										
Peak Forward Surge Current 8.3ms single	200									Α
half sine-wave superimposed on rated load										
(JEDEC method)										
Maximum Instantaneous Forward Voltage at	1.2									V
3.0A DC	1									
Maximum Reverse Current $T_A=25 \text{ ¢J}$	5.0									£gA
at Rated DC Blocking Voltage T <sub>A</sub> =100 ¢J	1000									£gA
Maximum Fu Load Reverse Current Full	0.5									mA
Cycle Average 5"(12.5mm)lead length at										
T <sub>L</sub> =105 ¢J										
Typical Junction capacitance (Note 1)	30									₽F
Typical Thermal Resistance (Note 2) R £KJA	20.0									¢J/W
Operating and Storage Temperature Range	-55 TO +150									¢J
$T_{J}$ , $T_{STG}$										

### 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 1N5400 THRU 1N5408



PERCENT OF RATED PEAK REVERSE VOLTAGE

Fig. 1-TYPICAL FORWARD CHARACTERISTICS

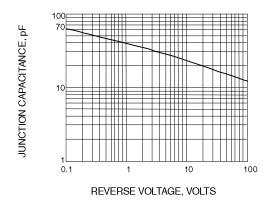


Fig. 3-TYPICAL JUNCTION CAPACITIANCE

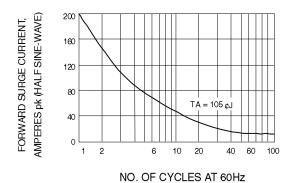


Fig. 5-MAXIMUM OVERLOAD SURGE CURRENT

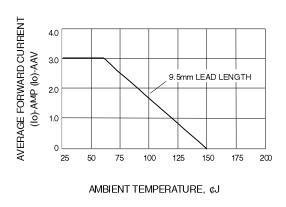


Fig. 2-PEAK FORWARD SURGE CURRENT

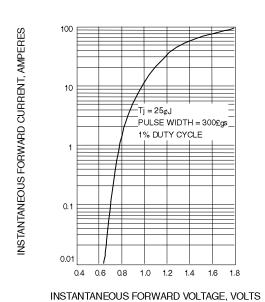


Fig. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS