Technical Data Data Sheet N0547, Rev. - **Green Products** 

# 1N5400 THRU 1N5408 GLASS PASSIVATED SILICON RECTIFIER

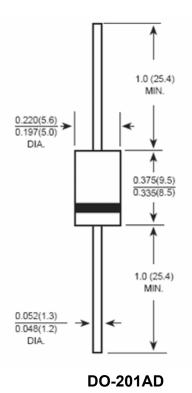
### Features:

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:
   250°C/10s,0.375"(9.5mm) lead length,5lbs.(2.3kg) tension
- This is a Pb Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

#### Mechanical data:

- Case: JEDEC DO-201AD molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD 750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Weight: 0.04 ounce, 1.10 grams

### **Mechanical Dimensions: In Inches / mm**



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## **Marking Diagram:**

Where XXXXX is YYWWL



1N5400 = Part Name SSG = SSG YY = Year WW = Week L = Lot Number

Cautions: Molding resin

Epoxy resin UL:94V-0

## **Ordering Information**

Device	Package	Shipping				
1N5400-1N5408	DO-201AD	1250pcs / tape				
	(Pb-Free)					

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

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## **Maximum Ratings and Electrical Characteristics**

Rating at  $25^{\circ}\text{C}$  ambient temperature unless otherwise specified

Single Phase half wave 60Hz, resistive or inductive load. For capacitive load current derate by 20%.

Characteristic	Symbol	1N 5400	1N 5401	1N 5402	1N 5403	1N 5404	1N 5405	1N 5406	1N 5407	1N 5408	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	300	400	500	600	800	1000	
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	210	280	350	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	300	400	500	600	800	1000	
Maximum average forward rectified current 0.375"(9.5mm) lead length at T <sub>A</sub> = 75°C	I <sub>(AV)</sub>	3.0									<b>V</b>
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	200								А	
Maximum instantaneous forward voltage at 3.0A	V <sub>F</sub>	1.2							٧		
Maximum DC reverse current T <sub>A</sub> = 25°C at rated DC blocking voltage T <sub>A</sub> = 100°C	I <sub>R</sub>	5.0 100							μΑ		
Typical junction capacitance (NOTE 1)	Сл	C <sub>J</sub> 30.0								pF	
Typical thermal resistance (NOTE 2)	R <sub>eJA</sub>	ua 20.0							°C /W		
Operating junction and storage temperature range	T <sub>J</sub> ,T <sub>STG</sub>	,T <sub>STG</sub> -65 to +175							°C		
Case Style	DO-201AD										

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

2. Thermal resistance form junction to ambient at 0.375"(9.5mm) lead length, P.C.B. mounted

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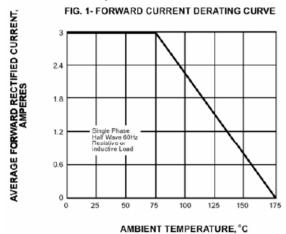


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

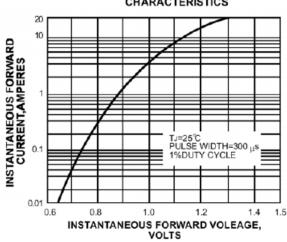
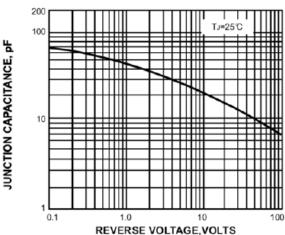
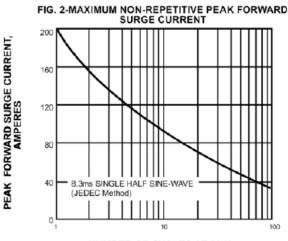
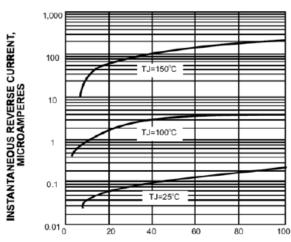


FIG. 5-TYPICAL JUNCTION CAPACITANCE

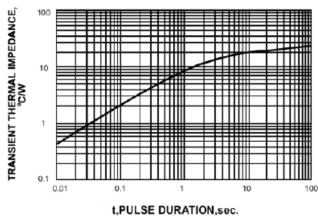




NUMBER OF CYCLES AT 60 Hz FIG. 4-TYPICAL REVERSE CHARACTERISTICS



PERCENT OF PEAK REVERSE VOLTAGE,%
FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



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