# 25-05763 >> 1N5401-T



# 1N5400 - 1N5408

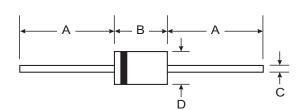
3.0A RECTIFIER

## **Features**

- **Diffused Junction**
- High Current Capability and Low Forward Voltage Drop
- Surge Overload Rating to 200A Peak
- Low Reverse Leakage Current
- Lead Free Finish, RoHS Compliant (Note 3)

## **Mechanical Data**

- Case: DO-201AD
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Terminals: Finish Tin. Plated Leads Solderable per MIL-STD-202, Method 208 **@3**
- Polarity: Cathode Band Marking: Type Number
- Weight: 1.1 grams (approximate)



DO-201AD						
Dim	Min	Max				
Α	25.40					
В	7.20	9.50				
С	1.20	1.30				
D	4.80	5.30				
All Dimensions in mm						

#### @ T<sub>A</sub> = 25°C unless otherwise specified **Maximum Ratings and Electrical Characteristics**

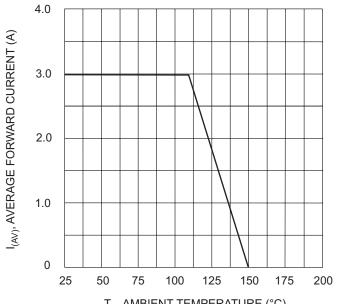
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	1N 5400	1N 5401	1N 5402	1N 5404	1N 5406	1N 5407	1N 5408	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	560	700	V
Average Rectified Output Current @ T <sub>A</sub> = 105°C (Note 1)	Io	3.0						А	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load		200					Α		
Forward Voltage @ I <sub>F</sub> = 3.0A	V <sub>FM</sub>	1.0				V			
Peak Reverse Current @ T <sub>A</sub> = 25°C at Rated DC Blocking Voltage @ T <sub>A</sub> = 150°C		10 100			μА				
Typical Total Capacitance (Note 2)	Ст	50 25				pF			
Typical Thermal Resistance Junction to Ambient		15					°C/W		
Operating and Storage Temperature Range		-65 to +150				°C			

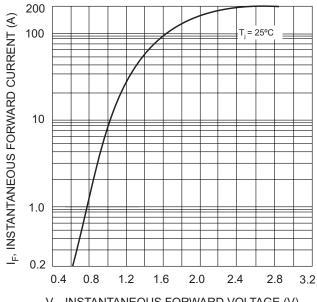
Notes:

- 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.
- 2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
- 3. RoHS revision 13.2.2003. Glass and High Temperature Solder Exemptions Applied, see EU Directive Annex Notes 5 and 7.

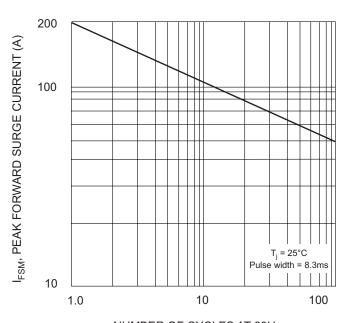




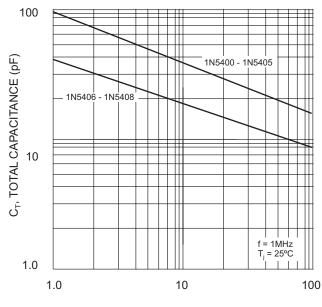
T<sub>A</sub>, AMBIENT TEMPERATURE (°C) Fig. 1 Forward Current Derating Curve



V<sub>F</sub>, INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 2 Typical Forward Characteristics



NUMBER OF CYCLES AT 60Hz
Fig. 3 Maximum Non-Repetitive Surge Current



V<sub>R</sub>, REVERSE VOLTAGE (V) Fig. 4 Typical Total Capacitance



## Ordering Information (Note 4)

Device	Packaging	Shipping		
1N5400-B	DO-201AD	500 Bulk		
1N5400-T	DO-201AD	1.2K/Tape & Reel, 13 inch		
1N5401-B	DO-201AD	500 Bulk		
1N5401-T	DO-201AD	1.2K/Tape & Reel, 13 inch		
1N5402-B	DO-201AD	500 Bulk		
1N5402-T	DO-201AD	1.2K/Tape & Reel, 13 inch		
1N5404-B	DO-201AD	500 Bulk		
1N5404-T	DO-201AD	1.2K/Tape & Reel, 13 inch		
1N5406-B	DO-201AD	500 Bulk		
1N5406-T	DO-201AD	1.2K/Tape & Reel, 13 inch		
1N5407-B	DO-201AD	500 Bulk		
1N5407-T	DO-201AD	1.2K/Tape & Reel, 13 inch		
1N5408-B	DO-201AD	500 Bulk		
1N5408-T	DO-201AD	1.2K/Tape & Reel, 13 inch		

Notes: 4. For Packaging Details, go to our website at http://www.diodes.com/datasheets/ap02008.pdf.

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