



# 1N5400 THRU 1N5408

Reverse Voltage - 50 to 1000 Volts Forward Current - 3.0 Ampere

## GENERAL PURPOSE SILICON RECTIFIER

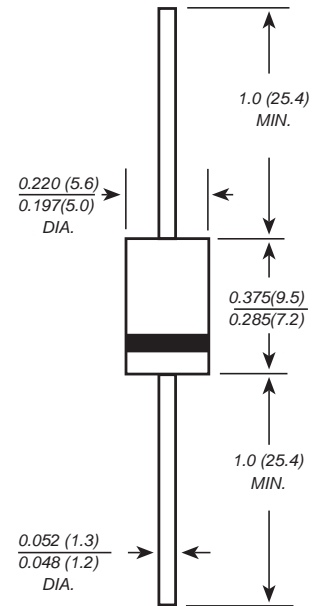
### Features

- ◆ 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/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

### Mechanical Data

**Case :** JEDEC DO-201AD Molded plastic body  
**Terminals :** Solder plated, solderable per MIL-STD-750, Method 2026  
**Polarity :** Polarity symbol marking on body  
**Mounting Position :** Any  
**Weight :** 0.04 ounce, 1.10 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 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	1N	1N	1N	1N	1N	1N	1N	1N	1N	UNITS
		5400	5401	5402	5403	5404	5405	5406	5407	5408	
Marking Code		MDD 1N 5400	MDD 1N 5401	MDD 1N 5402	MDD 1N 5403	MDD 1N 5404	MDD 1N 5405	MDD 1N 5406	MDD 1N 5407	MDD 1N 5408	
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	300	400	500	600	800	1000	V
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	V
Maximum average forward rectified current 0.375" (9.5mm) lead length at T <sub>A</sub> =75°C	I <sub>(AV)</sub>	3.0									A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	150.0									A
Maximum instantaneous forward voltage at 3.0A	V <sub>F</sub>	1.2									V
Maximum DC reverse current at rated DC blocking voltage	I <sub>R</sub>	5.0 100.0									μA
Typical junction capacitance (NOTE 1)	C <sub>J</sub>	30.0									pF
Typical thermal resistance (NOTE 2)	R <sub>θJA</sub>	20.0									°C/W
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +150									°C

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

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

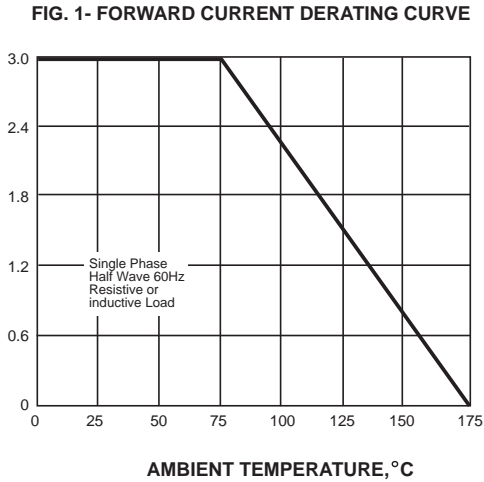


# 1N5400 THRU 1N5408

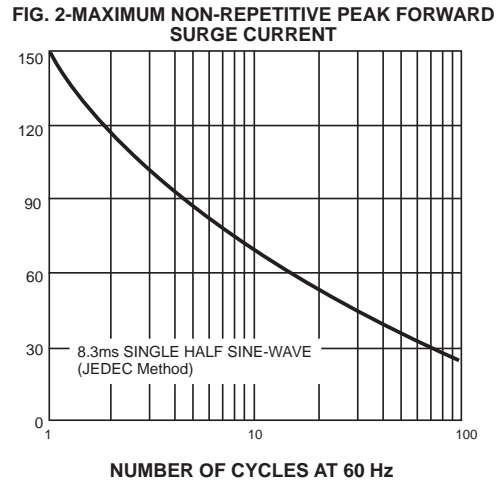
Reverse Voltage - 50 to 1000 Volts Forward Current - 3.0 Ampere

## Ratings And Characteristic Curves

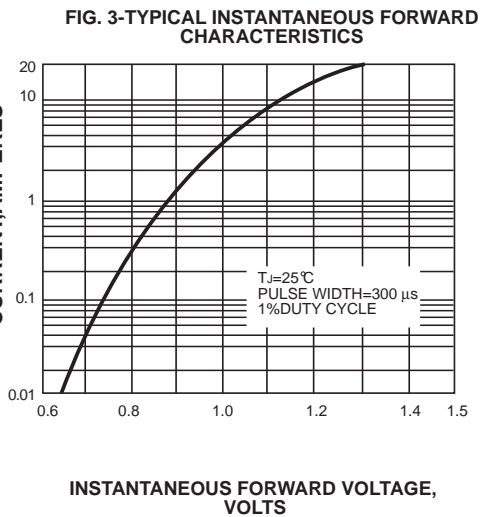
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES



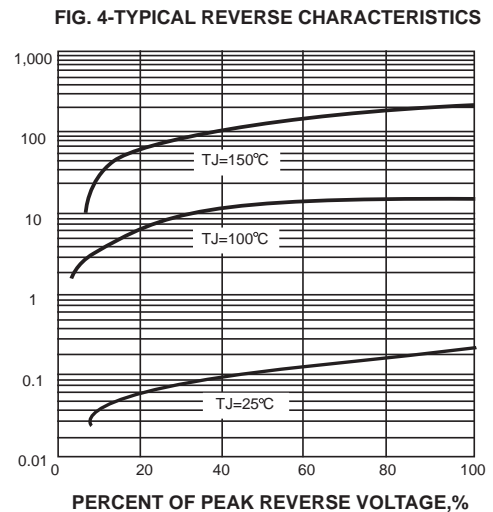
PEAK FORWARD SURGE CURRENT, AMPERES



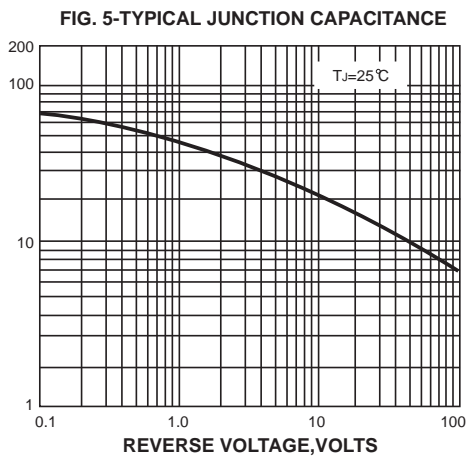
INSTANTANEOUS FORWARD CURRENT, AMPERES



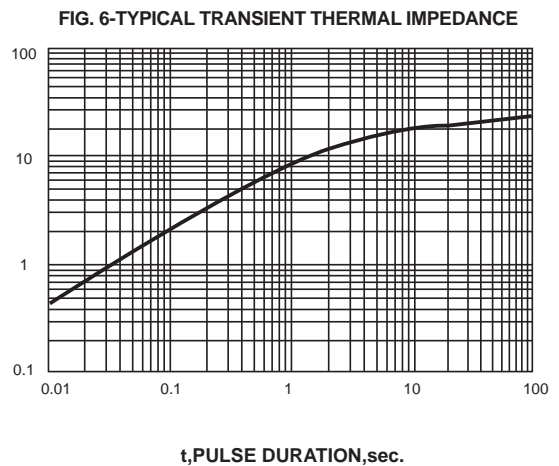
INSTANTANEOUS REVERSE CURRENT, MICROAMPERES



JUNCTION CAPACITANCE, pF



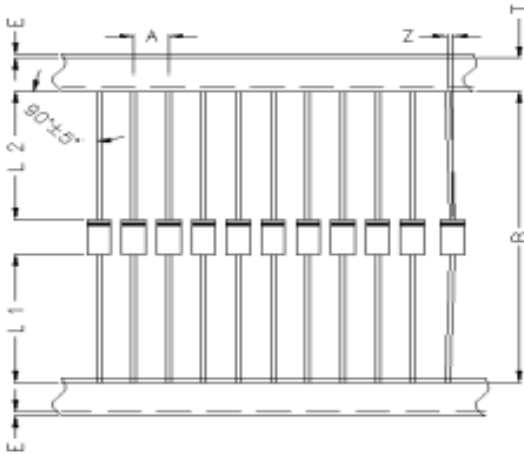
TRANSIENT THERMAL IMPEDANCE, °C/W



The curve above is for reference only.

## Package Information

### Taping Specifications



Item	Symbol	Specifications(mm)
Component Pitch	A	10.0±0.5
Inner Tape Pitch	B	52.4±1.5
Component alignment	Z	1.2 Max
Tape width	T	6.0±0.5
Exposed adhesive	E	0.8 Max
Body eccentricity	L1-L2	1.0 Max

### Ammunition Package Specifications

Package	Inner Box Size (mm)	QTY/Box (pcs)	Carton Size (mm)	Q'TY/Carton (pcs)
DO - 201AD	255*74*145	1000	410*275*340	10000

### Bulk Package Specifications

Package	Inner Box Size (mm)	QTY/Box (pcs)	Carton Size (mm)	Q'TY/Carton (pcs)
DO - 201AD	198*86*21	200	460*220*250	10000

## Important Notice and Disclaimer

Microdiode Electronics (Jiangsu) reserves the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.

Microdiode Electronics (Jiangsu) makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Microdiode Electronics (Jiangsu) assume any liability for application assistance or customer product design. Microdiode Electronics (Jiangsu) does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.

No license is granted by implication or otherwise under any intellectual property rights of Microdiode Electronics (Jiangsu).

Microdiode Electronics (Jiangsu) products are not authorized for use as critical components in life support devices or systems without express written approval of Microdiode Electronics (Jiangsu).