

## General Purpose Plastic Rectifier Diode in DO-201AD

### Features

- Low forward voltage drop
- Low leakage current
- High forward surge capability
- High current capability

### Mechanical Data

- **Case:** JEDEC DO-204AC(DO-201AD)molded plastic  
Lead free; RoHS compliant
- **Molding Compound Flammability Rating:**  
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:  
260 °C/10 sec. at terminals



Absolute Maximum Ratings											
Ratings at 25 °C, ambient temperature unless otherwise specified											
PARAMETER	SYM OL	1N5400	1N5401	1N5402	1N5403	1N5404	1N5405	1N5406	1N5407	1N5408	UNIT
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 0.5" (12.5 mm) lead length at T <sub>L</sub> = 105 °C	I <sub>F(AV)</sub>	3.0									A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	200									A
Maximum full load reverse current, full cycle average 0.5" (12.5 mm) lead length at T <sub>L</sub> = 105 °C	I <sub>R(AV)</sub>	500									µA
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	- 50 to + 150									°C

Electrical Characteristics												
(T <sub>A</sub> = 25 °C unless otherwise specified)												
PARAMETER	TEST CONDITIONS	SYMBOL	1N5400	1N5401	1N5402	1N5403	1N5404	1N5405	1N5406	1N5407	1N5408	UNIT
Maximum instantaneous forward voltage	3.0 A	V <sub>F</sub>	1.2									V
Maximum DC reverse current at rated DC blocking voltage	T <sub>A</sub> = 25 °C	I <sub>R</sub>	5.0									µA
	T <sub>A</sub> = 150 °C		500									
Typical junction capacitance	4.0 V, 1 MHz	C <sub>J</sub>	30									pF

**Typical Characteristics** ( $T_{amb} = 25\text{ }^{\circ}\text{C}$  unless otherwise specified)

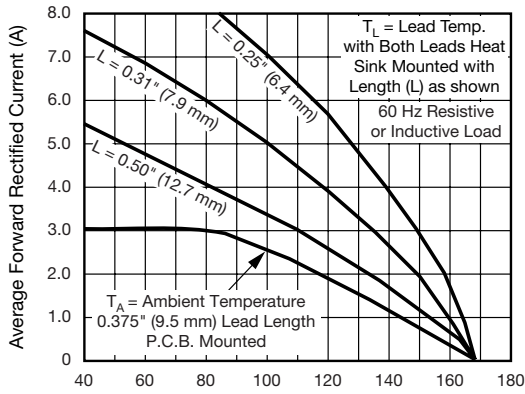


Fig. 1 - Forward Current Derating Curve

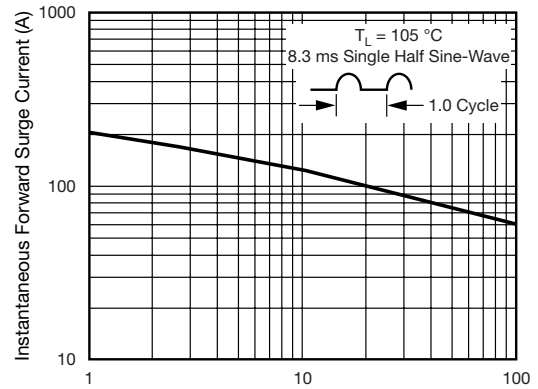


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

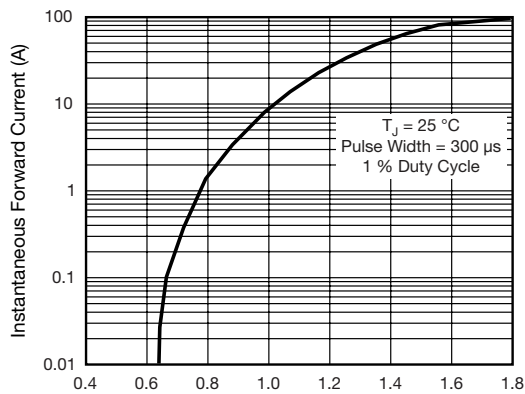


Fig. 3 - Typical Instantaneous Forward Characteristics

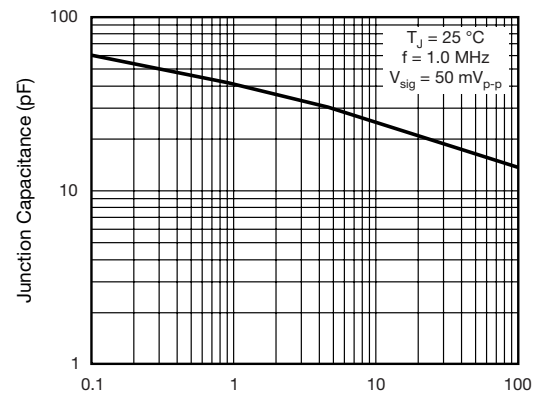


Fig. 5 - Typical Junction Capacitance

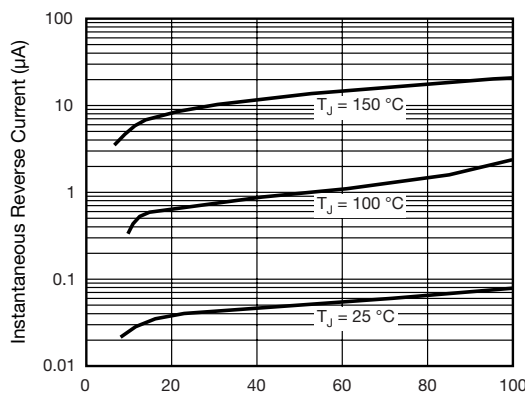


Fig. 4 - Typical Reverse Characteristics

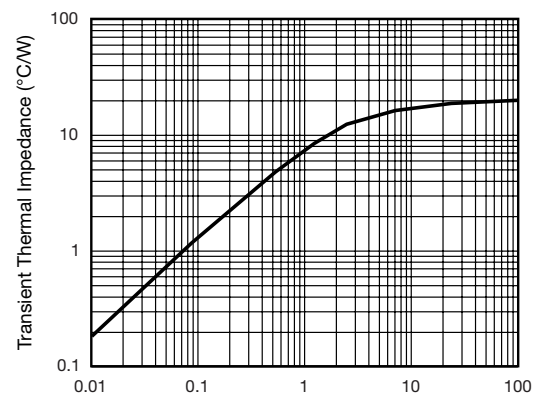
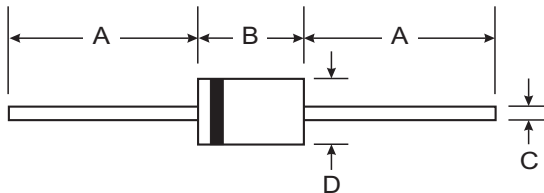


Fig. 6 - Typical Transient Thermal Impedance

## Package Dimensions



DO-201AD		
Dim	Min	Max
A	25.40	—
B	7.20	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in mm		

## Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
1N54XX	DO-201AD	Tape and BOX	1250pcs / BOX	

## Revision history

Date	Revision	Changes
23-May-2012	1.0	Initial release

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