

## 1N4001 - 1N4007 AXIAL LEADED RECTIFIER DIODES

VOLTAGE RANGE: 50 - 1000V CURRENT: 1.0 A

## **Features**

Diffused Junction

Low Forward Voltage Drop

High Current Capability

High Reliability

High Surge Current Capability

## **Mechanical Data**

Case: DO-41

• Terminals: Plated Leads Solderable per

MIL-STD-202, Method 208

Polarity: Cathode Band

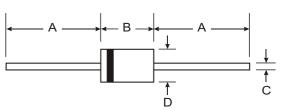
• Weight: 0.35 grams (approx.)

Mounting Position: Any

Marking: Type Number







DO-41							
Dim	Min	Max					
Α	25.40	_					
В	4.06	5.21					
С	0.71	0.864					
D	2.00	2.72					
All Dimensions in mm							

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

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

Characteristic	Symbol	1N 4001	1N 4002	1N 4003	1N 4004	1N 4005	1N 4006	1N 4007	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	Vrrm Vrwm Vr	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	VR(RMS)	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @T <sub>A</sub> = 75°C	lo	1.0						А	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	30						Α	
Forward Voltage @I <sub>F</sub> = 1.0A	VFM	1.0						V	
	lгм	5.0 50						μΑ	
Typical Junction Capacitance (Note 2)	Cj	15						pF	
Typical Thermal Resistance Junction to Ambient (Note 1)	RθJA	50					K/W		
Operating Temperature Range	Tj	-65 to +125					°C		
Storage Temperature Range	Тѕтс	-65 to +150					°C		

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case

2. Measured at 1.0 MHz and Applied Reverse Voltage of 4.0V D.C.



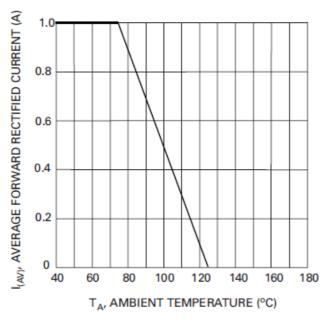


Fig. 1 Forward Current Derating Curve

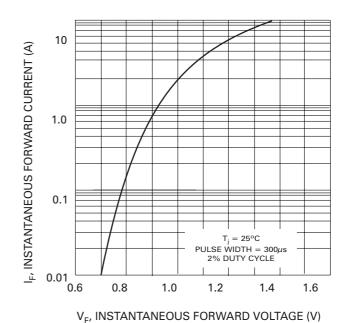


Fig. 2 Typical Forward Characteristics

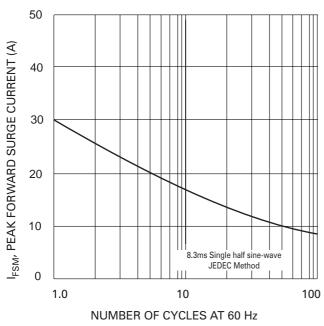


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

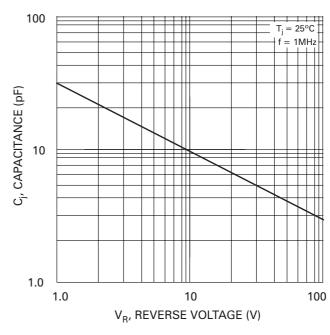


Fig. 4 Typical Junction Capacitance