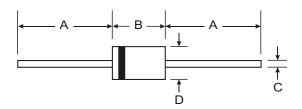


## 1N4001/L - 1N4007/L

**1.0A RECTIFIER** 

## **Features**

- **Diffused Junction**
- High Current Capability and Low Forward Voltage Drop
- Surge Overload Rating to 30A Peak
- Low Reverse Leakage Current
- Plastic Material: UL Flammability Classification Rating 94V-0



## **Mechanical Data**

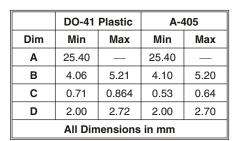
Case: Molded Plastic

Terminals: Plated Leads Solderable per MIL-STD-202, Method 208

Polarity: Cathode Band

Weight: DO-41 0.30 grams (approx) A-405 0.20 grams (approx)

Mounting Position: Any Marking: Type Number



"L" Suffix Designates A-405 Package No Suffix Designates DO-41 Package

## **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%.

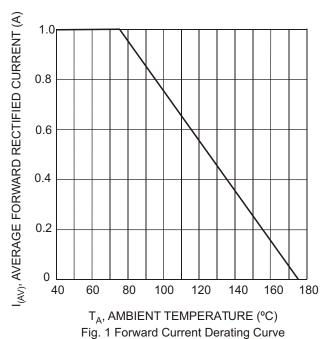
Characteristic	Symbol	1N 4001/L	1N 4002/L	1N 4003/L	1N 4004/L	1N 4005/L	1N 4006/L	1N 4007/L	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	50	100	200	400	600	800	1000	٧
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @ T <sub>A</sub> = 75°C	Io	1.0							Α
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	30						Α	
Forward Voltage @ I <sub>F</sub> = 1.0A	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> = 100°C		5.0 50						μА	
Typical Junction Capacitance (Note 2)	Cj	15 8					pF		
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	100					K/W		
Maximum DC Blocking Voltage Temperature	TA	+150						°C	
Operating and Storage Temperature Range (Note 3)	T <sub>j</sub> , T <sub>STG</sub>	-65 to +175						°C	

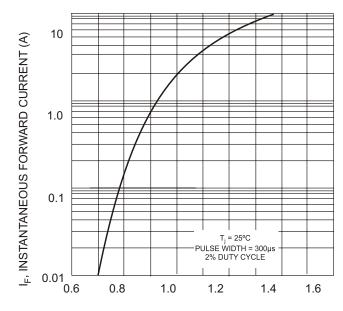
Notes: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.

2. Measured at 1. MHz and applied reverse voltage of 4.0V DC.

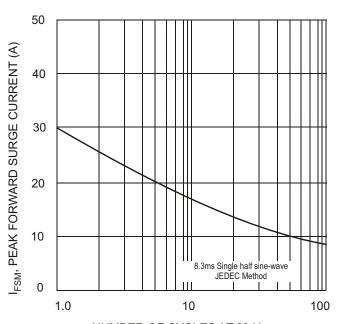
3. JEDEC Value



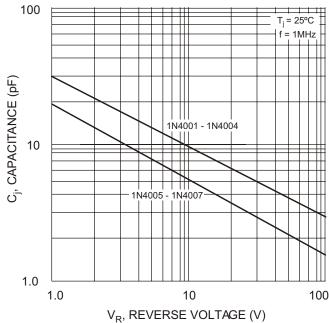




 $V_{\rm F}$ , INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 2 Typical Forward Characteristics



NUMBER OF CYCLES AT 60 Hz Fig. 3 Max Non-Repetitive Peak Fwd Surge Current



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