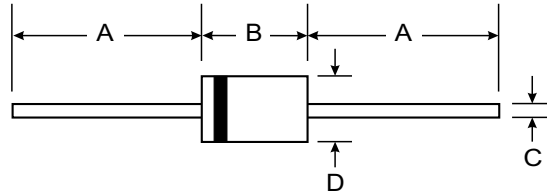


Features

- 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

	DO-41 Plastic		A-405	
Dim	Min	Max	Min	Max
A	25.40	—	25.40	—
B	4.06	5.21	4.10	5.20
C	0.71	0.864	0.53	0.64
D	2.00	2.72	2.00	2.70

All Dimensions in mm

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

Maximum Ratings and Electrical Characteristics @ $T_A = 25^\circ\text{C}$ 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_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	V	
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V	
Average Rectified Output Current (Note 1) @ $T_A = 75^{\circ}\text{C}$	I_O	1.0							A	
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30							A	
Forward Voltage @ $I_F = 1.0\text{A}$	V_{FM}	1.0							V	
Peak Reverse Current @ $T_A = 25^{\circ}\text{C}$ at Rated DC Blocking Voltage @ $T_A = 100^{\circ}\text{C}$	I_{RM}	5.0 50							μA	
Typical Junction Capacitance (Note 2)	C_j	15				8				pF
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	100							K/W	
Maximum DC Blocking Voltage Temperature	T_A	+150							$^{\circ}\text{C}$	
Operating and Storage Temperature Range (Note 3)	T_j, T_{STG}	-65 to +175							$^{\circ}\text{C}$	

- 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.

