

<u>1N4001 - 1N4007</u>

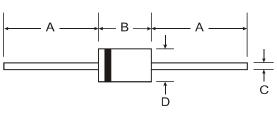
1.0A RECTIFIER

Features

- **Diffused Junction** .
- High Current Capability and Low Forward Voltage Drop •
- Surge Overload Rating to 30A Peak
- Low Reverse Leakage Current
- Lead Free Finish, RoHS Compliant (Note 3)

Mechanical Data

- Case: DO-41 •
- Case Material: Molded Plastic. UL Flammability Classification • Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020D .
- Terminals: Finish Bright Tin. Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Mounting Position: Any
- Ordering Information: See Page 2 •
- Marking: Type Number
- Weight: 0.30 grams (approximate)



Dim	DO-41	Plastic
Dim	Min	Max
Α	25.40	
В	4.06	5.21
С	0.71	0.864
D	2.00	2.72
	Dimension	s in mm

Maximum Ratings and Electrical Characteristics @T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load.

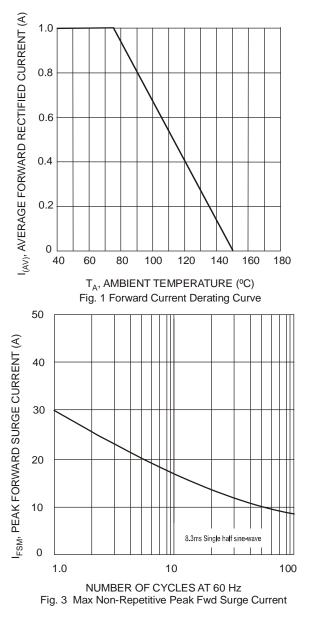
Characteristic	Symbol	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @ T _A = 75°C	lo				1.0				А
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{FSM}				30				А
Forward Voltage @ I _F = 1.0A	V _{FM}				1.0				V
Peak Reverse Current $@T_A = 25^{\circ}C$ at Rated DC Blocking Voltage $@T_A = 100^{\circ}C$	I _{RM}				5.0 50				μΑ
Typical Junction Capacitance (Note 2)	Ci		1	5			8		pF
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$				100				K/W
Maximum DC Blocking Voltage Temperature	T _A				+150				°C
Operating and Storage Temperature Range	T _{J,} T _{STG}			-	65 to +15	C			°C

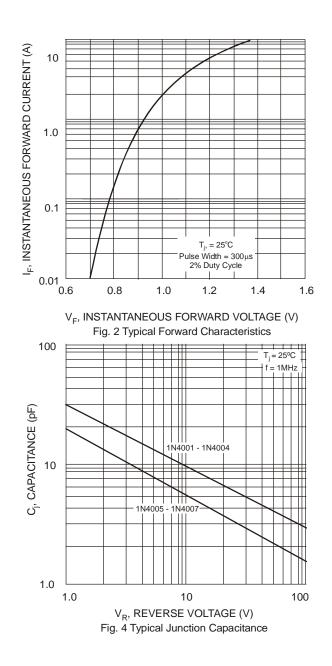
1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.

Leads initialities and applied reverse voltage of 4.0V DC.
EU Directive 2002/95/EC (RoHS). All applicable RoHS exemptions applied, see EU Directive 2002/95/EC Annex Notes.

Notes:







Ordering Information (Note 4)

Device	Packaging	Shipping	
1N4001-B	DO-41 Plastic	1K/Bulk	
1N4001-T	DO-41 Plastic	5K/Tape & Reel, 13-inch	
1N4002-B	DO-41 Plastic	1K/Bulk	
1N4002-T	DO-41 Plastic	5K/Tape & Reel, 13-inch	
1N4003-B	DO-41 Plastic	1K/Bulk	
1N4003-T	DO-41 Plastic	5K/Tape & Reel, 13-inch	
1N4004-B	DO-41 Plastic	1K/Bulk	
1N4004-T	DO-41 Plastic	5K/Tape & Reel, 13-inch	
1N4005-B	DO-41 Plastic	1K/Bulk	
1N4005-T	DO-41 Plastic	5K/Tape & Reel, 13-inch	
1N4006-B	DO-41 Plastic	1K/Bulk	
1N4006-T	DO-41 Plastic	5K/Tape & Reel, 13-inch	
1N4007-B	DO-41 Plastic	1K/Bulk	
1N4007-T	DO-41 Plastic	5K/Tape & Reel, 13-inch	

Notes: 4. For packaging details, visit our website at http://www.diodes.com/datasheets/ap02008.pdf.



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