

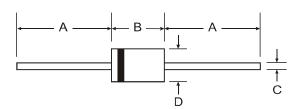
<u>1N4001 - 1N4007</u>

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					
ווווט	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 @TA = 25°C unless otherwise specified

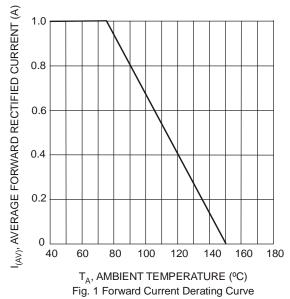
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

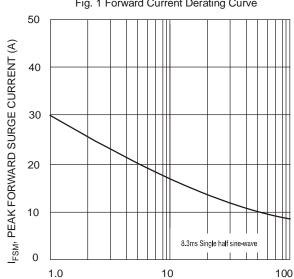
Characteristic	Symbol	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @ T _A = 75°C	lo	1.0						Α	
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	30						Α	
Forward Voltage @ I _F = 1.0A	V_{FM}	1.0						V	
Peak Reverse Current @T _A = 25°C at Rated DC Blocking Voltage @ T _A = 100°C	I _{RM}	5.0 50						μА	
Typical Junction Capacitance (Note 2)	C _i	15 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	$T_{J_i}T_{STG}$	-65 to +150					°C		

Notes:

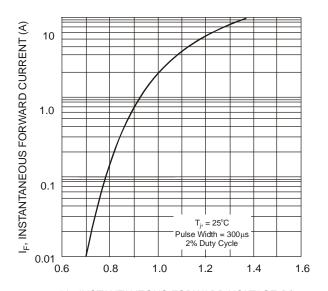
- 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.
- Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
 EU Directive 2002/95/EC (RoHS). All applicable RoHS exemptions applied, see EU Directive 2002/95/EC Annex Notes.

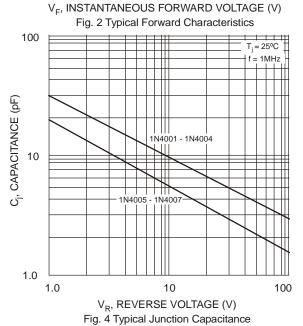






NUMBER OF CYCLES AT 60 Hz Fig. 3 Max Non-Repetitive Peak Fwd Surge Current





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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