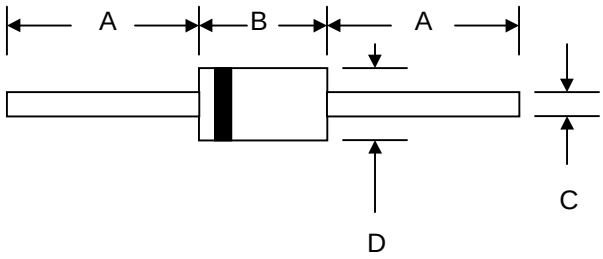
1N4001 – 1N4007

1.0A SILICON RECTIFIER

Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability



DO-41		
Dim	**Min**	**Max**
A	25.4	—
B	4.06	5.21
C	0.71	0.864
D	2.00	2.72
All Dimensions in mm		

Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.35 grams (approx.)
- Mounting Position: Any
- Marking: Type Number

Maximum Ratings and Electrical Characteristics @T_A=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	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	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 = 1.0A	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							µA
Typical Junction Capacitance (Note 2)	C_j	15							pF
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	50							K/W
Operating Temperature Range	T_j	-65 to +125							°C
Storage Temperature Range	T_{STG}	-65 to +150							°C

***Glass passivated forms are available upon request**

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.

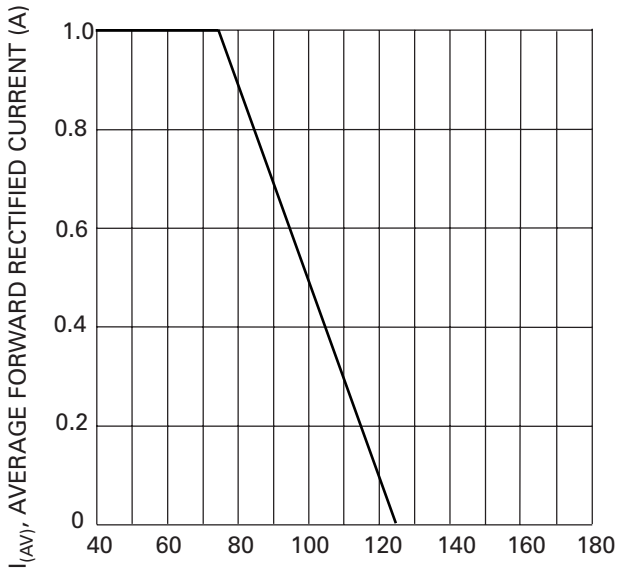


Fig. 1 Forward Current Derating Curve

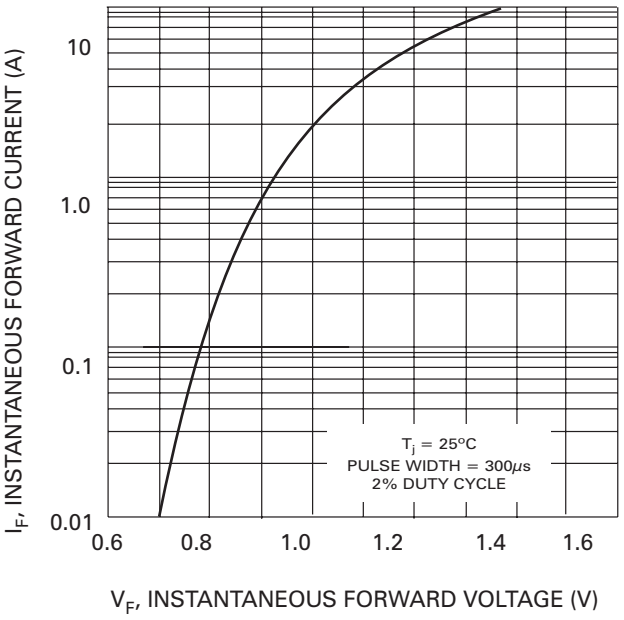


Fig. 2 Typical Forward Characteristics

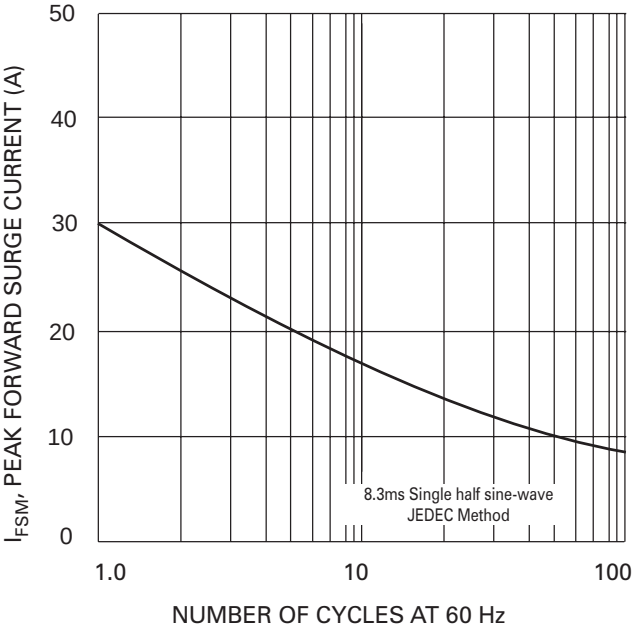


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

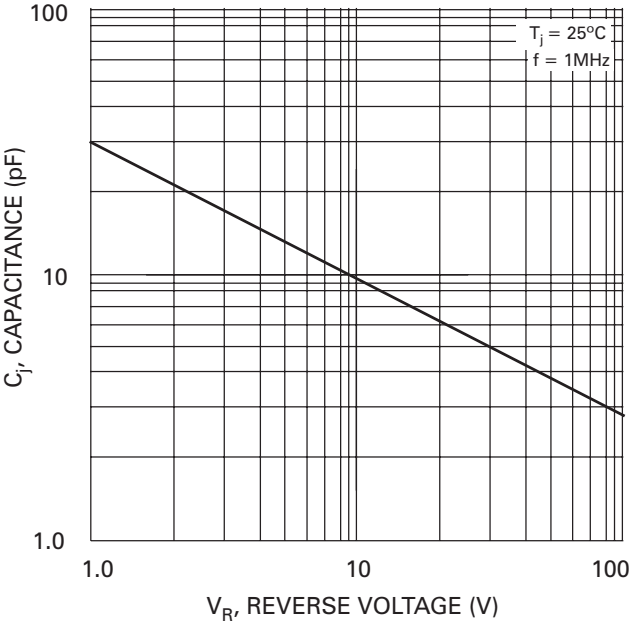


Fig. 4 Typical Junction Capacitance

ORDERING INFORMATION

Product No.◆	Package Type	Shipping Quantity
1N4001-T3	DO-41	5000/Tape & Reel
1N4001-TB	DO-41	5000/Tape & Box
1N4001	DO-41	1000 Units/Box
1N4002-T3	DO-41	5000/Tape & Reel
1N4002-TB	DO-41	5000/Tape & Box
1N4002	DO-41	1000 Units/Box
1N4003-T3	DO-41	5000/Tape & Reel
1N4003-TB	DO-41	5000/Tape & Box
1N4003	DO-41	1000 Units/Box
1N4004-T3	DO-41	5000/Tape & Reel
1N4004-TB	DO-41	5000/Tape & Box
1N4004	DO-41	1000 Units/Box
1N4005-T3	DO-41	5000/Tape & Reel
1N4005-TB	DO-41	5000/Tape & Box
1N4005	DO-41	1000 Units/Box
1N4006-T3	DO-41	5000/Tape & Reel
1N4006-TB	DO-41	5000/Tape & Box
1N4006	DO-41	1000 Units/Box
1N4007-T3	DO-41	5000/Tape & Reel
1N4007-TB	DO-41	5000/Tape & Box
1N4007	DO-41	1000 Units/Box

Products listed in **bold** are WTE **Preferred** devices.
◆T3 suffix refers to a 13" reel. TB suffix refers to Ammo Pack.
Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

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