

CentralTM Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

1N4001 SERIES

1.0 AMP SILICON RECTIFIER
50 THRU 1000 VOLTS

JEDEC DO-41 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 1N4001 Series types are 1.0 Amp Silicon Rectifiers which are high quality, well constructed, highly reliable components designed for use in all types of commercial, industrial, entertainment, computer, and automotive applications.

MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

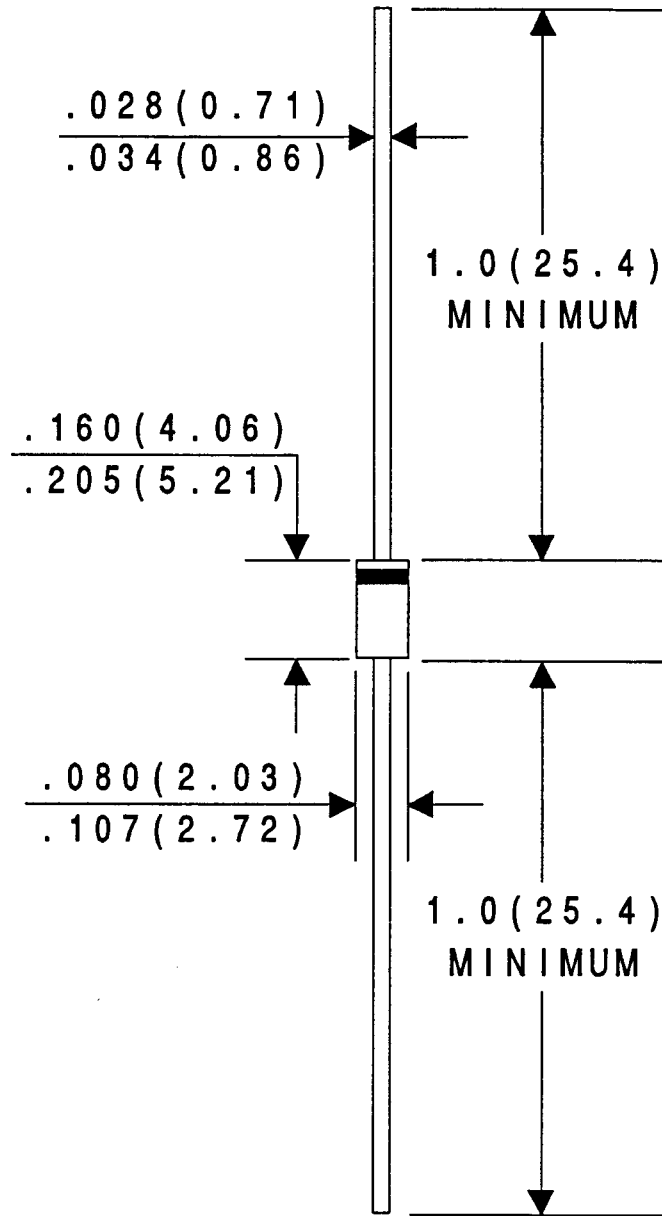
| | SYMBOL | 1N 4001 | 1N 4002 | 1N 4003 | 1N 4004 | 1N 4005 | 1N 4006 | 1N 4007 | UNITS |
|---|----------------|------------|------------|------------|-------------|------------|------------|------------|--------------------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| DC Blocking Voltage | 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 Forward Current @ $T_A = 75^\circ\text{C}$ | I_O | | | | 1.0 | | | | A |
| Peak Forward Surge Current | I_{FSM} | | | | 50 | | | | A |
| Operating and Storage Junction Temperature | T_J, T_{stg} | | | | -65 to +175 | | | | $^\circ\text{C}$ |
| Thermal Resistance | θ_{JA} | | | | 26 | | | | $^\circ\text{C/W}$ |

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

| SYMBOL | TEST CONDITIONS | MIN | MAX | UNITS |
|--------|--|-----|-----|---------------|
| I_R | $V_R = \text{Rated } V_{RRM}$ | | 5.0 | μA |
| I_R | $V_R = \text{Rated } V_{RRM}, T_A = 100^\circ\text{C}$ | | 50 | μA |
| V_F | $I_F = 1.0\text{A}$ | | 1.1 | V |

(SEE REVERSE FOR OUTLINE DRAWING)

JEDEC DO-41 CASE - MECHANICAL OUTLINE



All Dimensions in Inches (mm).