

General Purpose Rectifiers Standard Recovery Plastic Silicon Rectifiers

Specification Features:

- Case: Epoxy, Molded
- Weight: 0.4 gram (approximately)
- Finish: All External Surfaces Corrosion Resistant And Terminal Leads Are Readily Solderable
- Lead And Mounting Surface Temperature For Soldering Purposed: 260°C Max. For 10 Seconds 1.16 Inch From Case
- RoHS Compliant
- Low Reverse Leakage, High Forward Surge Capability
- Cathode Indicated By Polarity Band



DEVICE MARKING DIAGRAM



1N4001 : Device Name 1N4001-1N4007
KEL : KEL Logo

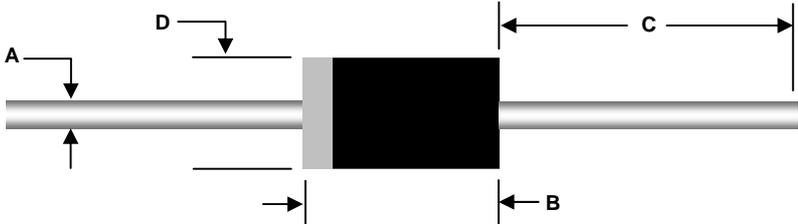
Absolute Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise noted

| Parameter | Symbol | 1N4001 | 1N4002 | 1N4003 | 1N4004 | 1N4005 | 1N4006 | 1N4007 | Units |
|--|-----------------|-------------|--------|--------|--------|--------|--------|--------|--------------------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum DC Blocking Voltage | V_R | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectifier Current. (0.375" Lead Length @ $T_A=75^\circ\text{C}$) | $I_{F(AV)}$ | 1.0 | | | | | | | A |
| Non-repetitive Peak Forward Surge Current. (8.3mS Single Half Sine-wave) | I_{FSM} | 30 | | | | | | | A |
| Operating Junction and Storage Temperature Range | T_J, T_{STG} | -65 to +175 | | | | | | | $^\circ\text{C}$ |
| Thermal Resistance (Junction to Ambient) | $R_{\theta JA}$ | 65 | | | | | | | $^\circ\text{C/W}$ |

Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

| Parameter | Symbol | 1N4001 | 1N4002 | 1N4003 | 1N4004 | 1N4005 | 1N4006 | 1N4007 | Units |
|---|--------|--------|--------|--------|--------|--------|--------|--------|---------------|
| Reverse Current @ V_R | I_R | 5 | | | | | | | μA |
| Forward Voltage @1A | V_F | 1.1 | | | | | | | V |
| Total Capacitance @ $V_R=4\text{V}, f=1\text{MHz}$ | C_T | 15 | | | | | | | pF |

Package Outline

| Package | Case Outline | | | | |
|----------|--|-------------|-------|--------|-------|
| DO-41 |  | | | | |
| | DIM | DO-41 | | | |
| | | Millimeters | | Inches | |
| | | Min | Max | Min | Max |
| | A | --- | 0.86 | --- | 0.034 |
| | B | --- | 5.20 | --- | 0.205 |
| C | 25.40 | --- | 1.000 | --- | |
| D | --- | 2.71 | --- | 0.107 | |

This datasheet presents technical data of Tak Cheong's Silicon Rectifier Diodes. Complete specifications for the individual devices are provided in the form of datasheets. A comprehensive Selector Guide is included to simplify the task of choosing the best set of components required for a specific application. For additional information, please visit our website <http://www.takcheong.com>.

Although information in this datasheet has been carefully checked, no responsibility for the inaccuracies can be assumed by Tak Cheong. Please consult your nearest Tak Cheong's sales office for further assistance.

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