



Features:

- Low forward voltage drop
- High current capability

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

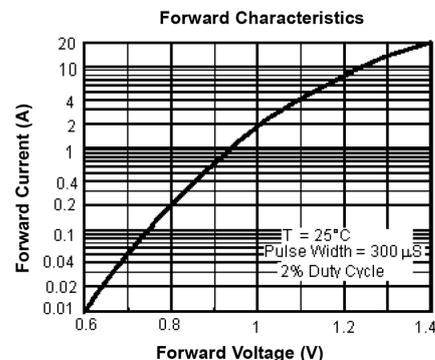
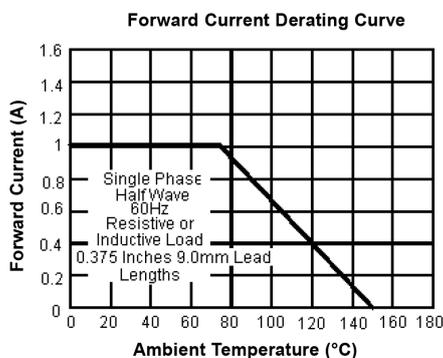
| Parameter | Symbol | Value | Units |
|---|-----------------|-------------|---------------------------|
| Average Rectified Current 0.375 Inches Lead Length at $T_A = 75^\circ\text{C}$ | I_o | 1 | A |
| Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave Superimposed on Rated Load (JEDEC Method) | i_f (surge) | 30 | |
| Total Device Dissipation Derate above 25°C | P_D | 2.5 20 | W mW/ $^\circ\text{C}$ |
| Thermal Resistance, Junction to Ambient | $R_{\theta JA}$ | 50 | $^\circ\text{C}/\text{W}$ |
| Storage Temperature Range | T_{STG} | -55 to +175 | $^\circ\text{C}$ |
| Operating Junction Temperature | T_J | -55 to +150 | |

*These Ratings are Limiting Values above Which the Serviceability of Any Semiconductor Device may be Impaired.

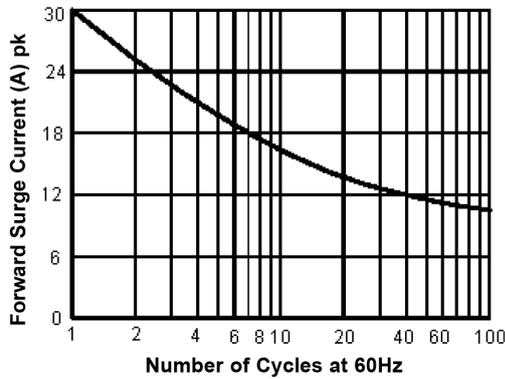
Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

| Parameter | Device | | | | | | Unit |
|---|----------|-------|-------|-------|-------|-------|---------------|
| | 4001+ | 4002+ | 4003+ | 4004+ | 4005+ | 4006+ | |
| Peak Repetitive Reverse Voltage | 50 | 100 | 200 | 400 | 600 | 1,000 | V |
| Maximum RMS Voltage | 35 | 70 | 140 | 280 | 420 | 700 | |
| DC Reverse Voltage (Rated V_R) | 50 | 100 | 200 | 400 | 600 | 1,000 | |
| Maximum Reverse Current at Rated V_R $T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$ | 5 500 | | | | | | μA |
| Maximum Forward Voltage at 1A | 1.1 | | | | | | V |
| Maximum Full Load Reverse Current, Full Cycle $T_A = 75^\circ\text{C}$ | 30 | | | | | | μA |
| Typical Junction Capacitance $V_R = 4\text{V}$, $f = 1\text{ MHz}$ | 15 | | | | | | pF |

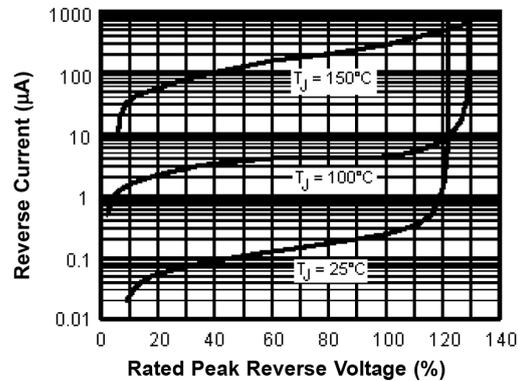
Typical Characteristics



Non-Repetitive Surge Current

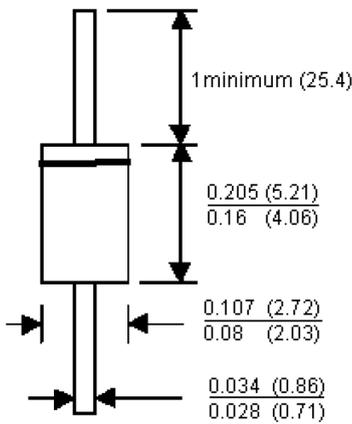


Reverse Characteristics



Dimensions:

DO-41



Dimensions : Inches (Millimetres)

Part Number Table

| Description | Part Number |
|---------------------------|-------------|
| Diode, Standard, 1A, 50V | 1N4001+ |
| Diode, Standard, 1A, 100V | 1N4002+ |
| Diode, Standard, 1A, 200V | 1N4003+ |
| Diode, Standard, 1A, 400V | 1N4004+ |
| Diode, Standard, 1A, 600V | 1N4005+ |
| Diode, Standard, 1A, 800V | 1N4006+ |

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