# PLANAR DIODES

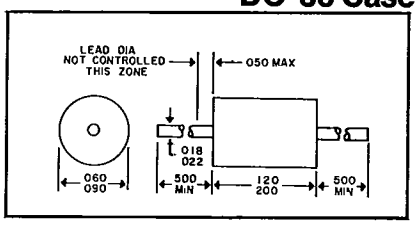
## DO-35 Case

| Type | Peak Inverse Voltage | Minimum Forward Current | Maximum Reverse Current @ 25°C | Maximum Reverse Current @ 150°C | | Maximum Capacitance | Maximum Reverse Recovery Time @ 10 mA | Dissipation |
|---|---|---|---|---|---|---|---|---|
| | PIV | $I_F$ @ $V_F$ | $I_r$ | $I_r$ | $V_r$ | C @ 0V | $t_{rr}$ @ $I_F$ | P |
| | V | mA V | μA | μA | V | pf | ns | mW |
| 1N456 | 30 | 40 @ 1 | .025 | 5 | 25 | — | — | 250 |
| 1N456A | 30 | 100 @ 1 | .025 | 5 | 25 | — | — | 250 |
| 1N457 | 70 | 20 @ 1 | .025 | 5 | 60 | — | — | 250 |
| 1N457A | 70 | 100 @ 1 | .025 | 5 | 60 | — | — | 250 |
| 1N458 | 150 | 7 @ 1 | .025 | 5 | 125 | — | — | 250 |
| 1N458A | 150 | 100 @ 1 | .025 | 5 | 125 | — | — | 250 |
| 1N458B | 80 | 100 @ 1 | .025 | 5 | 60 | — | — | 250 |
| 1N619 | 30 | 3 @ 1 | .080 | 16 @ 100°C | 10 | — | — | — |
| 1N890 | 60 | 20 @ 1 | .025 | | | 10 Typ | — | 250 |
| 1N914 | 100 | 10 @ 1 | .025 | 50 | 20 | 4 Typ | 4 | — |
| 1N3062 | 75 | 20 @ 1 | .100 | 100 | 50 | 1 | 2 | — |
| 1N3064 | 75 | 10 @ 1 | .100 | 100 | 50 | 2 | 4 | 250 |
| 1N3147 | 60 | 100 @ 1 | | 20 @ 100°C | 30 | — | — | 600 |
| 1N3600 | 50 | 200 @ 1 | .100 | 100 | 50 | 2.5 | 4 @ 2 mA | — |
| 1N3602 | 50 | 20 @ 1 | .100 | 100 | 50 | 3 | 5 | — |
| 1N3605 | 40 | 0.1 @ 0.55 | .050 | 50 | 50 | 2 | 4 | — |
| 1N4009 | 25 | 30 @ 1 | .100 | 100 | 25 | 4 | 2 | — |
| 1N4148 | 75 | 10 @ 1 | .025 | 50 | 20 | 4 | 4 | 500 |
| 1N4149 | 75 | 10 @ 1 | .025 | 50 | 20 | 2 | — | 500 |
| 1N4150 | 50 | 200 @ 1 | .100 | 100 | 50 | 2.5 | 6 @ 2 mA | 400 |

## DO-35 Case

| Type | Peak Inverse Voltage | Minimum Forward Current | Maximum Reverse Current @ 25°C | Maximum Reverse Current @ 150°C | | Maximum Capacitance | Maximum Reverse Recovery Time @ 10 mA | Dissipation |
|---|---|---|---|---|---|---|---|---|
| | PIV | $I_F$ @ $V_F$ | $I_r$ | $I_r$ | $V_r$ | C @ 0V | $t_{rr}$ @ $I_F$ | P |
| | V | mA V | μA | μA | V | pf | ns | mW |
| 1N4151 | 75 | 50 @ 1 | .050 | 50 | 50 | 2 | — | 400 |
| 1N4152 | 40 | 20 @ .88 | .050 | 50 | 30 | 2 | 4 | 400 |
| 1N4153 | 75 | 20 @ .88 | .050 | 50 | 50 | 2 | 4 | 400 |
| 1N4154 | 35 | 30 @ 1 | .100 | 100 | 25 | 4 | 4 | 400 |
| 1N4305 | 75 | 10 @ .85 | .100 | 100 | 50 | 2 | 4 | 400 |
| 1N4446 | 100 | 20 @ 1 | .025 | 50 | 20 | 4 | 4 | 250 |
| 1N4447 | 100 | 20 @ 1 | .025 | 50 | 20 | 2 | 4 | 250 |
| 1N4448 | 75 | 100 @ 1 | .025 | 50 | 20 | 4 | 4 | 250 |
| 1N4449 | 75 | 30 @ 1 | .025 | 50 | 20 | 2 | 4 | 250 |
| 1N4450 | 30 | 1 @ .64 | .050 | 50 | 30 | 4 | 4 | — |
| 1N4451 | 50 | 50 @ 1 | .050 | 50 | 50 | 2 | 2 | — |
| 1N4452 | 30 | 1 @ .62 | .050 | 50 | 30 | 3 | 5 | — |
| 1N4454 | 75 | 10 @ 1 | .100 | 100 | 50 | 2 | 4 | 500 |
| 1N4531 | 100 | 10 @ 1 | .025 | 50 | 20 | 4 | 4 | — |
| 1N4534 | 50 | 10 @ .81 | .050 | 50 | 50 | 2 | 2 | — |
| 1N4606 | 85 | 250 @ 1.1 | .100 | 25 @ 100°C | 50 | 2.5 | 6 | 500 |
| 1N4607 | 85 | 400 @ 1.1 | .100 | 25 @ 100°C | 50 | 4 | 10 | — |
| 1N4608 | 85 | 500 @ 1.1 | .100 | 25 @ 100°C | 50 | 4 | 10 | — |
| 1N4727 | 30 | 10 @ .85 | .100 | 10 @ 100°C | 20 | 4 | 4 | — |
| 1N4861 | 40 | 100 @ 1.2 | .002 | 4 | 30 | 3.5 | 1000 | — |
| 1N4862 | 70 | 100 @ 1.1 | .005 | 10 | 50 | 3.3 | 1000 | — |
| 1N5194 | 80 | 100 @ 1 | .025 | 5 | 70 | — | — | 250 |
| 1N5208 | 70 | 20 @ 1 | .025 | 5 | 60 | — | — | 200 |
| 1N5209 | 150 | 7 @ 1 | .025 | 5 | 125 | — | — | 200 |
| 1N5282 | 80 | 100 @ .9 | — | — | — | 2.5 | 4 | — |
| AP5317 | 80 | 300 @ 1.1 | .10 | 100 | 55 | 2.5 | 4 | — |
| 1N5426 | 25 | 40 @ 1 | 1.00 | | 6 | 1.1 | — | 200 |
| 1N5605 | 70 | 20 @ 1 | .025 | 5 | 60 | — | — | 250 |
| APD3595 | 150 | 100 @ 1 | .001 | 0.5 @ 125°C | 125 | 8 | — | 500 |

## DO-35 Case

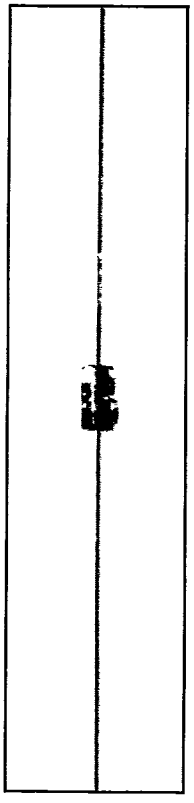



American Power Devices offers a broad line of silicon planar switching diodes featuring nanosecond switching, with high forward conductance, low leakage current and low capacitance. Switching speeds are as low as 2ns with peak inverse voltages up to 150V. They are available in DO-35 cases.

All silicon planar diodes are manufactured in double plug packages making the devices rugged and highly reliable.

Applications for these switching diodes are in data processing equipment in such areas as logic circuits, memory core driving, pulse circuitry, and other high speed switching applications.

## DO-35 Case

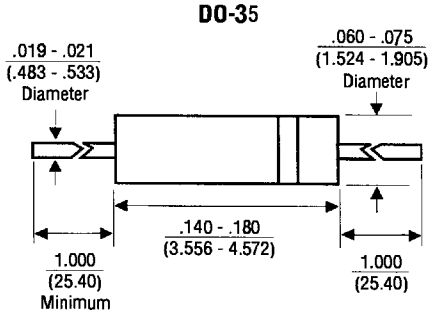


# SWITCHING DIODES

| Part # | Peak Voltage | Continous Reverse Current | Forward Voltage | Capacitance C Maximum | Reverse Recovery Time |
|---|---|---|---|---|---|
| | $V_{ZM}$ (V) | $I_R$ (nA) @ $V_R$ (V) | $V_F$ (V) @ $I_F$ (mA) | (pF) | $t_{rr}$ (nS) |
| **200mW** | | | | | |
| 1N914 | 100 | 5000 @ 75 | 1.0 @ 10 | 4.0 | 4.00 |
| 1N914A | 100 | 5000 @ 75 | 1.0 @ 20 | 4.0 | 4.00 |
| 1N914B | 100 | 5000 @ 75 | 1.0 @ 100 | 4.0 | 4.00 |
| **500mW** | | | | | |
| 1N4148 | 100 | 5000 @ 75 | 1.0 @ 10 | 4.0 | 4.00 |
| 1N4151 | 75 | 50 @ 50 | 1.0 @ 50 | 2.0 | 2.00 |
| 1N4154 | 35 | 100 @ 25 | 1.0 @ 30 | 4.0 | 2.00 |
| 1N4448 | 100 | 5000 @ 75 | 1.0 @ 100 | 4.0 | 4.00 |
| 1N4454 | 75 | 100 @ 50 | 1.0 @ 10 | 2.0 | 4.00 |

| Part # | Peak Voltage | Minimum Forward Current | Maximum Reverse Current @ 25°C | Maximum Reverse Current @ 150°C | | Maximum Capacitance | Maximum Reverse Recovery Time @ 10mA |
|---|---|---|---|---|---|---|---|
| | $V_{ZM}$ (V) | $I_F$ (mA) @ $V_F$ (V) | $I_r$ (µA) | $I_r$ (µA) | $V_r$ (V) | C @ 0V (pF) | $t_{rr}$ @ $I_F$ (ns) |
| **200mW** | | | | | | | |
| 1N5208 | 70 | 20 @ 1 | .025 | 5 | 60 | — | — |
| 1N5209 | 150 | 7 @ 1 | .025 | 5 | 125 | — | — |
| 1N5282 | 80 | 100 @ .9 | — | — | — | 2.5 | 4 |
| AP5317 | 80 | 300 @ 1.1 | .10 | 100 | 55 | 2.5 | 4 |
| 1N5426 | 25 | 40 @ 1 | 1.00 | | 6 | 1.1 | — |
| **250mW** | | | | | | | |
| 1N456 | 30 | 40 @ 1 | .025 | 5 | 25 | — | — |
| 1N456A | 30 | 100 @ 1 | .025 | 5 | 25 | — | — |
| 1N457 | 70 | 20 @ 1 | .025 | 5 | 60 | — | — |
| 1N457A | 70 | 100 @ 1 | .025 | 5 | 60 | — | — |
| 1N458 | 150 | 7 @ 1 | .025 | 5 | 125 | — | — |
| 1N458A | 150 | 100 @ 1 | .025 | 5 | 125 | — | — |
| 1N458B | 80 | 100 @ 1 | .025 | 5 | 60 | — | — |
| 1N619 | 30 | 3 @ 1 | .080 | 16 @ 100°C | 10 | — | — |
| 1N890 | 60 | 20 @ 1 | .025 | | | 10 Typ | — |
| 1N3062 | 75 | 20 @ 1 | .100 | 100 | 50 | 1 | 2 |
| 1N3064 | 75 | 10 @ 1 | .100 | 100 | 50 | 2 | 4 |
| 1N4446 | 100 | 20 @ 1 | .025 | 50 | 20 | 4 | 4 |
| 1N4447 | 100 | 20 @ 1 | .025 | 50 | 20 | 2 | 4 |
| 1N4449 | 75 | 30 @ 1 | .025 | 50 | 20 | 2 | 4 |
| 1N4450 | 30 | 1 @ .64 | .050 | 50 | 30 | 4 | 4 |
| 1N4451 | 50 | 50 @ 1 | .050 | 50 | 50 | 2 | 2 |
| 1N4452 | 30 | 1 @ .62 | .050 | 50 | 30 | 3 | 5 |
| 1N5194 | 80 | 100 @ 1 | .025 | 5 | 70 | — | — |
| 1N5605 | 70 | 20 @ 1 | .025 | 5 | 60 | — | — |
| **400mW** | | | | | | | |
| 1N4150 | 50 | 200 @ 1 | .100 | 100 | 50 | 2.5 | 6 @ 2mA |
| 1N4152 | 40 | 20 @ .88 | .050 | 50 | 30 | 2 | 4 |
| 1N4153 | 75 | 20 @ .88 | .050 | 50 | 50 | 2 | 4 |
| 1N4305 | 75 | 10 @ .85 | .100 | 100 | 50 | 2 | 4 |

**DO-35**




Operating temperature -65°C to +150°C
5% standard tolerance; Special tolerances available upon request

SEMICONDUCTORS

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