



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

1N4148
THRU
1N4448

TECHNICAL SPECIFICATIONS OF HIGH SPEED SWITCHING DIODES

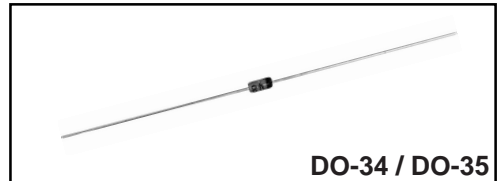
VOLTAGE RANGE - 50 to 100 Volts CURRENT - 0.15 to 0.2 Ampere

FEATURES

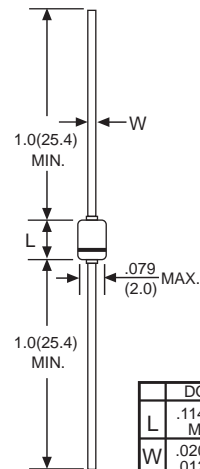
- * Silicon epitaxial planar diodes
- * Low power loss, high efficiency
- * Low leakage
- * Low forward voltage
- * High speed switching
- * High current capability
- * High reliability

MECHANICAL DATA

- * Case: Glass sealed case
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 0.13 gram



DO-34 / DO-35



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

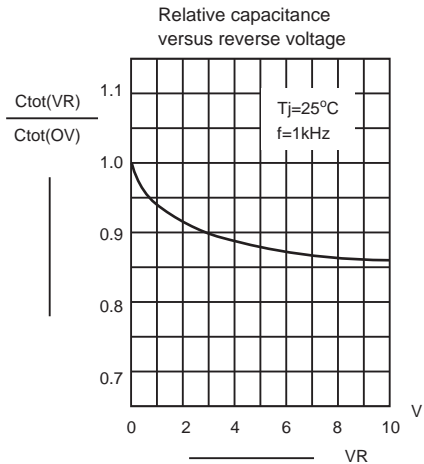
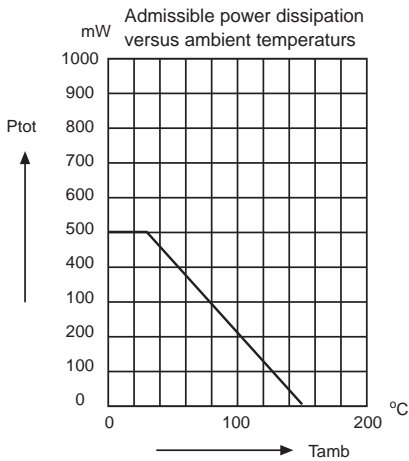
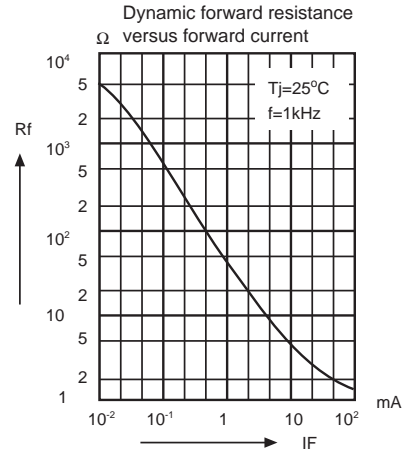
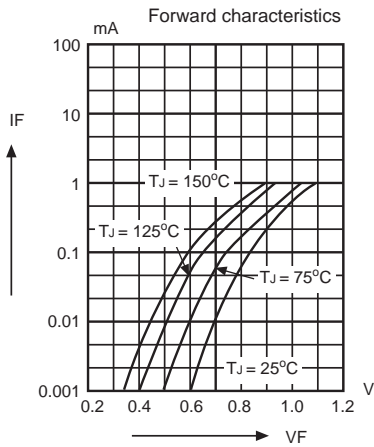
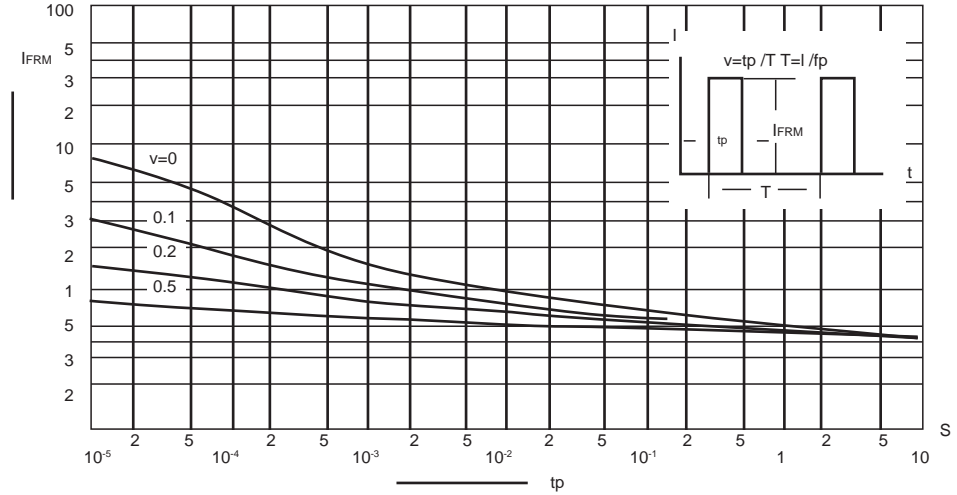
| | SYMBOL | 1N4148 | 1N4150 | 1N4151 | 1N4448 | UNITS |
|--|-----------------------------------|-------------|---------|--------|---------|--------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 100 | 50 | 75 | 100 | V |
| Maximum Average Rectified Current | I _o | 150 | 200 | 150 | 150 | mA |
| Maximum Power Dissipation T _{amb} = 25°C | P _{tot} | 500 | 500 | 500 | 500 | mW |
| Maximum Forward Voltage | V _F @I _F | 1.0/10 | 1.0/200 | 1.0/50 | 1.0/100 | V/mA |
| Maximum Reverse Current | I _R @V _R | 5000/75 | 100/50 | 50/50 | 5000/75 | nA/V |
| Maximum Reverse Recovery Time | t _{rr} | 4.0 | 4.0 | 2.0 | 4.0 | nS |
| Peak Forward Surge Current, t < 1s and T _J = 25°C | I _{FSM} | 0.5 | | | | A |
| Typical Junction Capacitance | R _{θJA} | 300 | | | | °C / W |
| Typical thermal Resistance | C _J | 4.0 | | | | pF |
| Operating and Storage Temperature Range | T _J , T _{STG} | -55 to +150 | | | | °C |

NOTE: Suffix "M" stands for "DO-34" package.(e.g.:1N4148M)

RATING AND CHARACTERISTIC CURVES (1N4148 THRU 1N4448)

REF: 1N4148

A Admissible repetitive peak forward current versus pulse duration



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