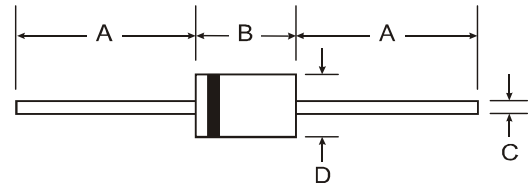




## Features

- Diffused Junction
- Fast Switching for High Efficiency
- High Current Capability and Low Forward Voltage Drop
- Surge Overload Rating to 30A Peak
- Low Reverse Leakage Current
- **Lead Free Finish, RoHS Compliant (Notes 1 & 2)**



## Mechanical Data

- Case: DO-41
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Finish - Bright Tin. Plated Leads Solderable per MIL-STD-202, Method 208 (3)
- Polarity: Cathode Band
- Mounting Position: Any
- Marking: Type Number
- 0.35 grams (Approximate)

| Dim                  | DO-41 Plastic |       |
|----------------------|---------------|-------|
|                      | Min           | Max   |
| A                    | 25.40         | —     |
| B                    | 4.06          | 5.21  |
| C                    | 0.71          | 0.864 |
| D                    | 2.00          | 2.72  |
| All Dimensions in mm |               |       |

## Ordering Information (Note 3)

| Device   | Packaging | Shipping                |
|----------|-----------|-------------------------|
| 1N4933-T | DO-41     | 5K/Tape & Reel, 13-inch |
| 1N4934-T | DO-41     | 5K/Tape & Reel, 13-inch |
| 1N4935-T | DO-41     | 5K/Tape & Reel, 13-inch |
| 1N4936-T | DO-41     | 5K/Tape & Reel, 13-inch |
| 1N4937-T | DO-41     | 5K/Tape & Reel, 13-inch |

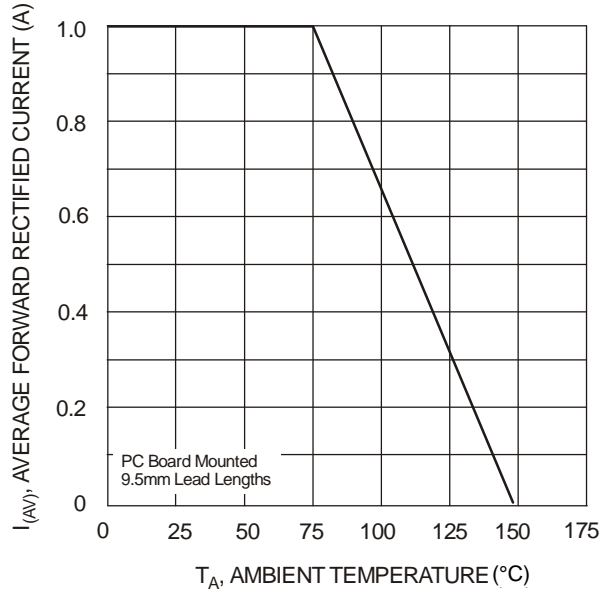
- Notes:
1. EU Directive 2002/95/EC (RoHS), 2011/65/EU (RoHS 2) & 2015/863/EU (RoHS 3) compliant. All applicable RoHS exemptions applied.
  2. See <https://www.diodes.com/quality/lead-free/> for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
  3. For packaging details, go to our website at <https://www.diodes.com/design/support/packaging/diodes-packaging/>.

## Maximum Ratings and Electrical Characteristics (@T<sub>A</sub> = +25°C, unless otherwise specified.)

Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

| Characteristic   | Symbol                            | 1N4933      | 1N4934 | 1N4935 | 1N4936 | 1N4937 | Unit |
|--|-----------------------------------|-------------|--------|--------|--------|--------|------|
| Peak Repetitive Reverse Voltage  | V <sub>RRM</sub>                  |             |        |        |        |        | V    |
| Working Peak Reverse Voltage   | V <sub>RWM</sub>                  | 50          | 100    | 200    | 400    | 600    | V    |
| DC Blocking Voltage (Note 7)   | V <sub>R</sub>                    |             |        |        |        |        | V    |
| RMS Reverse Voltage  | V <sub>R(RMS)</sub>               | 35          | 70     | 140    | 280    | 420    | V    |
| Average Rectified Output Current (Note 4) @ T <sub>A</sub> = +75°C                               | I <sub>O</sub>                    | 1.0         |        |        |        |        | A    |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load | I <sub>FSM</sub>                  | 30          |        |        |        |        | A    |
| Forward Voltage Drop @ I <sub>F</sub> = 1.0A   | V <sub>FM</sub>                   | 1.2         |        |        |        |        | V    |
| Peak Reverse Current @ T <sub>A</sub> = +25°C  | I <sub>RM</sub>                   | 5.0         |        |        |        |        | μA   |
| at Rated DC Blocking Voltage (Note 7) @ T <sub>A</sub> = +100°C                                  |                                   | 100         |        |        |        |        |      |
| Reverse Recovery Time (Note 6)   | t <sub>RR</sub>                   | 200         |        |        |        |        | ns   |
| Typical Total Capacitance (Note 5)   | C <sub>T</sub>                    | 15          |        |        |        |        | pF   |
| Typical Thermal Resistance Junction to Ambient   | R <sub>θJA</sub>                  | 100         |        |        |        |        | °C/W |
| Operating and Storage Temperature Range  | T <sub>J</sub> , T <sub>STG</sub> | -65 to +150 |        |        |        |        | °C   |

- Notes:
4. Leads maintained at ambient temperature at a distance of 9.5mm from the case.
  5. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
  6. Measured with I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1A, I<sub>rr</sub> = 0.25A.
  7. Short duration pulse test used to minimize self-heating effect.



$T_A$ , AMBIENT TEMPERATURE (°C)  
Fig. 1 Forward Current Derating Curve

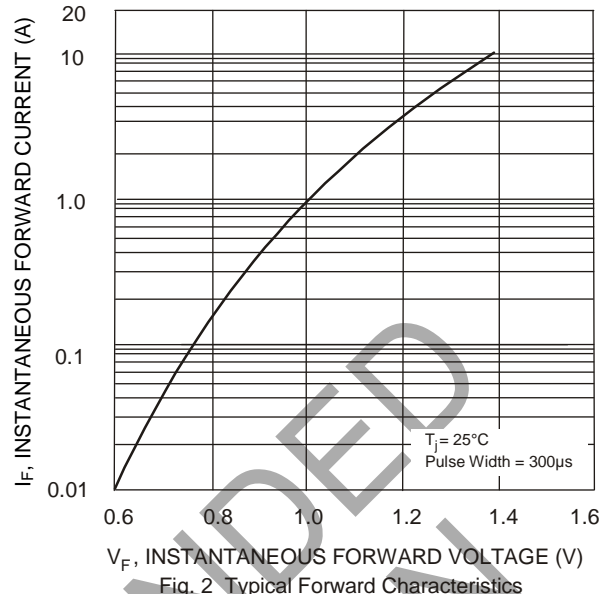


Fig. 2 Typical Forward Characteristics

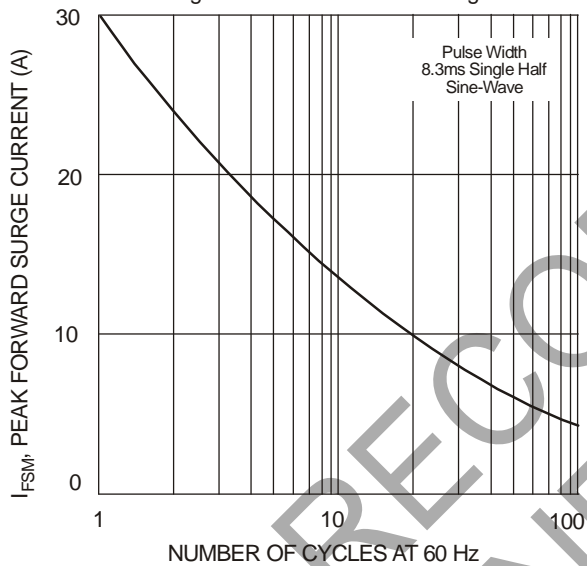


Fig. 3 Max Non-Repetitive Peak Forward Surge Current

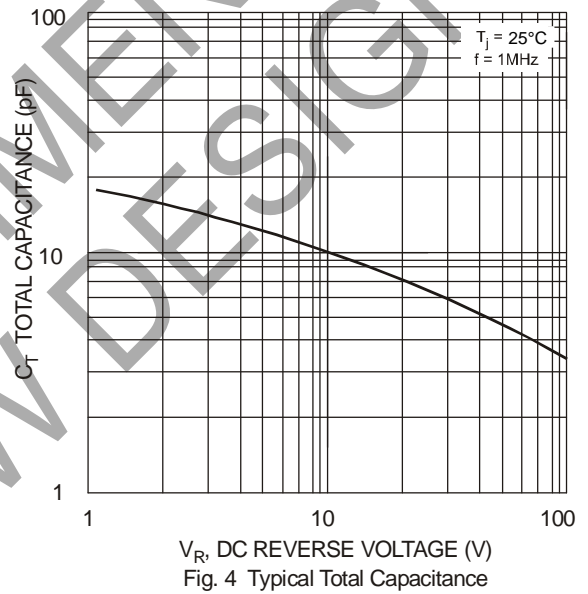


Fig. 4 Typical Total Capacitance

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