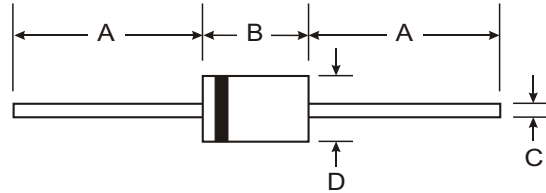


Features

- 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
- Plastic Material: UL Flammability Classification Rating 94V-0



Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: DO-41 0.35 grams (approx)
- A-405 0.20 grams (approx)
- Mounting Position: Any
- Marking: Type Number

| Dim | DO-41 Plastic | | A-405 | |
|-----|---------------|-------|-------|------|
| | Min | Max | Min | Max |
| A | 25.40 | — | 25.40 | — |
| B | 4.06 | 5.21 | 4.10 | 5.20 |
| C | 0.71 | 0.864 | 0.53 | 0.64 |
| D | 2.00 | 2.72 | 2.00 | 2.70 |

All Dimensions in mm

“L” Suffix Designates A-405 Package
No Suffix Designates DO-41 Package

Maximum Ratings and Electrical Characteristics @ T_A = 25°C unless otherwise specified

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

| Characteristic | Symbol | 1N4933/L | 1N4934/L | 1N4935/L | 1N4936/L | 1N4937/L | Unit |
|---|-----------------------------------|-------------|----------|----------|----------|----------|------|
| Peak Repetitive Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | V |
| Working Peak Reverse Voltage | V _{RWM} | | | | | | |
| DC Blocking Voltage | V _R | | | | | | |
| RMS Reverse Voltage | V _{R(RMS)} | 35 | 70 | 140 | 280 | 420 | V |
| Average Rectified Output Current (Note 1) | I _O | 1.0 | | | | | A |
| @ T _A = 75°C | | | | | | | |
| Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I _{FSM} | 30 | | | | | A |
| Forward Voltage Drop | V _{FM} | 1.2 | | | | | V |
| @ I _F = 1.0A | | | | | | | |
| Peak Reverse Current | I _{RM} | 5.0 | | | | | μA |
| @ T _A = 25°C | | | | | | | |
| at Rated DC Blocking Voltage | | 100 | | | | | |
| @ T _A = 100°C | | | | | | | |
| Reverse Recovery Time (Note 3) | t _{rr} | 200 | | | | | ns |
| Typical Junction Capacitance (Note 2) | C _j | 15 | | | | | pF |
| Typical Thermal Resistance Junction to Ambient | R _{θJA} | 100 | | | | | K/W |
| Operating and Storage Temperature Range | T _j , T _{STG} | -65 to +150 | | | | | °C |

- Notes:
1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.
 2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
 3. Measured with I_F = 0.5A, I_R = 1A, I_{rr} = 0.25A.

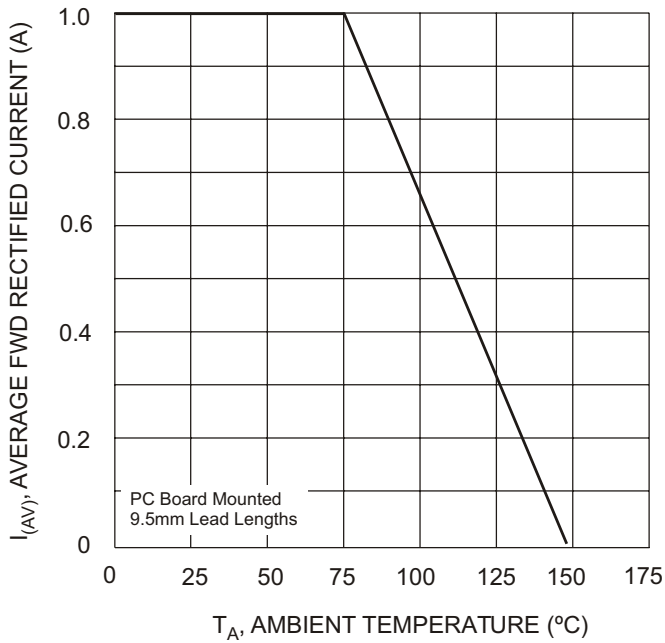


Fig. 1 Forward Current Derating Curves

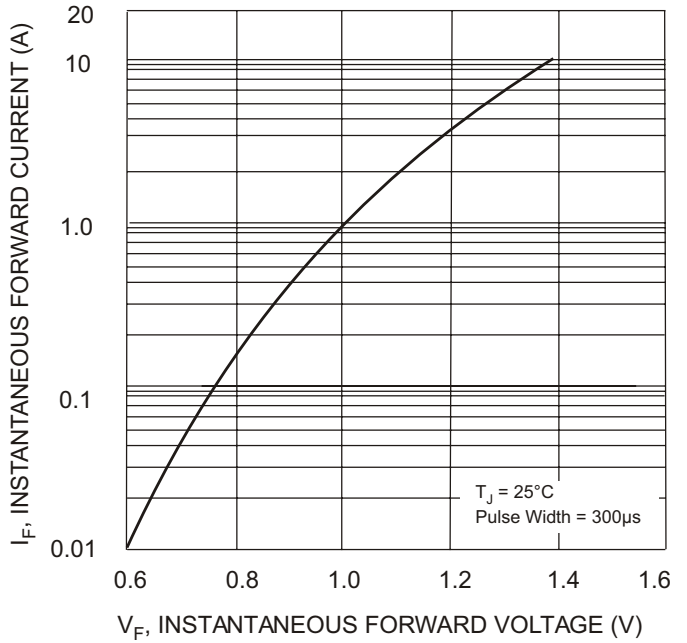


Fig. 2 Typical Forward Characteristics

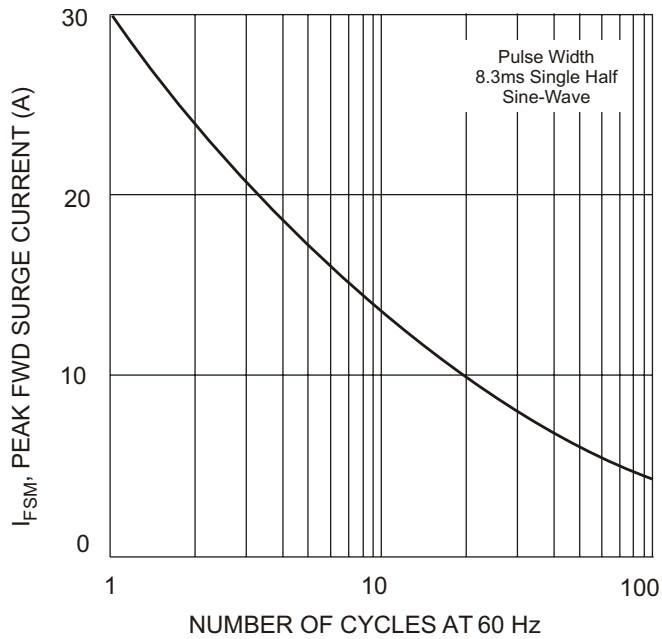


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

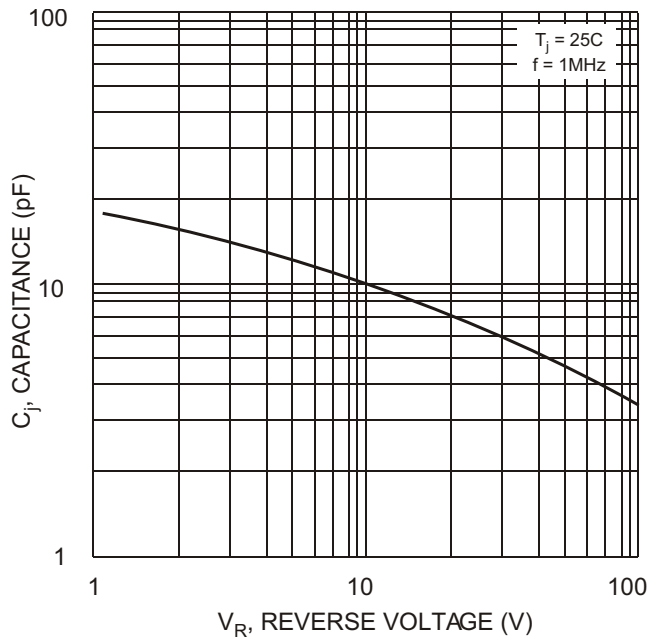


Fig. 4 Typical Junction Capacitance