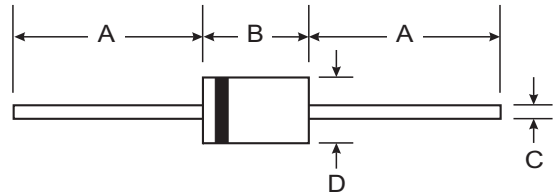


Features

- Glass Passivated Die Construction
- Diffused Junction
- Fast Switching for High Efficiency
- High Current Capability and Low Forward Voltage Drop
- Surge Overload Rating to 30A Peak
- **Lead Free Finish, RoHS Compliant (Note 4)**



Mechanical Data

- Case: DO-41, A-405
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Terminals: Finish - Bright Tin. Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Ordering Information: See Last Page
- Marking: Type Number
- DO-41 Weight: 0.35 grams (approximate)
- A-405 Weight: 0.20 grams (approximate)

| Dim | DO-41 | | 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

"GL" Suffix Designates A-405 Package
"G" 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 G/GL | 1N4934 G/GL | 1N4935 G/GL | 1N4936 G/GL | 1N4937 G/GL | 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 | I _{FSM} | 30 | | | | | A |
| 8.3ms Single half sine-wave Superimposed on Rated Load (JEDEC Method) | | | | | | | |
| Forward Voltage | 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 | | | | | | | |
| @ 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. Valid provided that leads are 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 = 1.0A, I_{rr} = 0.25A.
 4. RoHS revision 13.2.2003. Glass and High Temperature Solder Exemptions Applied, see *EU Directive Annex Notes 5 and 7*.

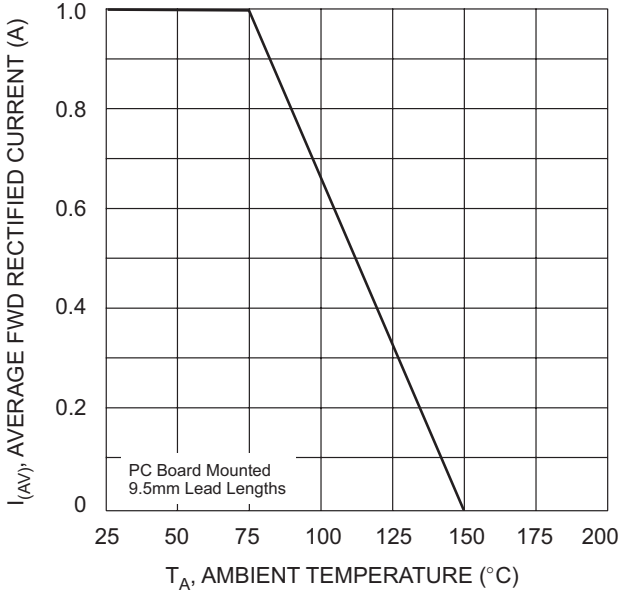


Fig. 1 Forward Current Derating Curves

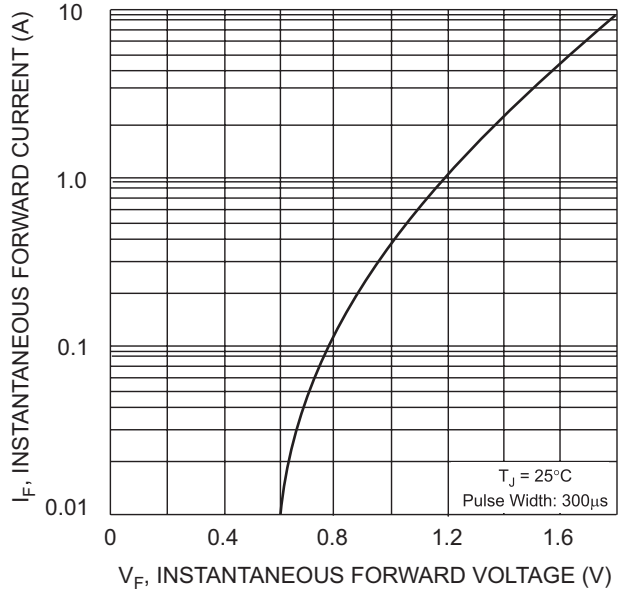


Fig. 2 Typical Forward Characteristics

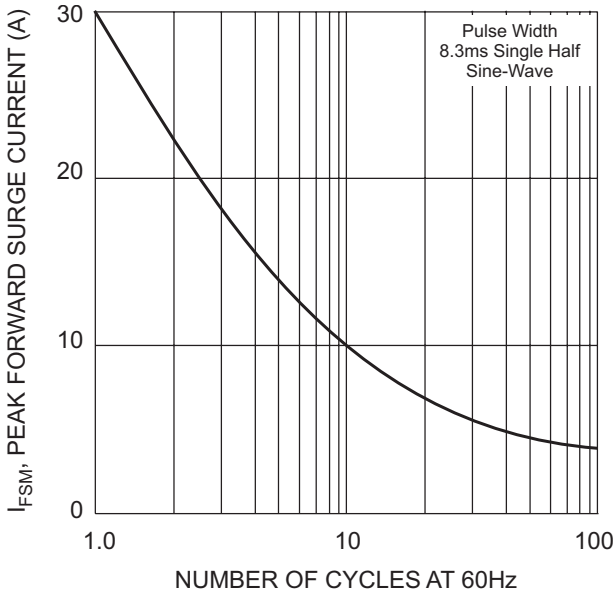


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

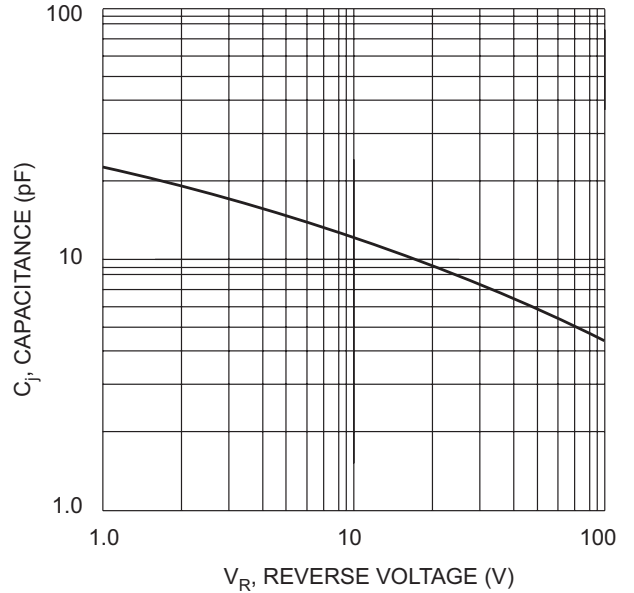
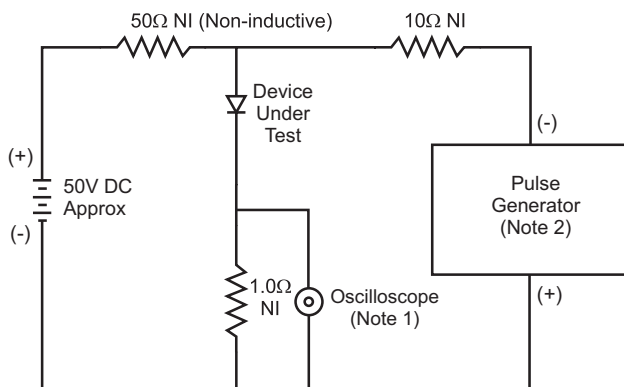
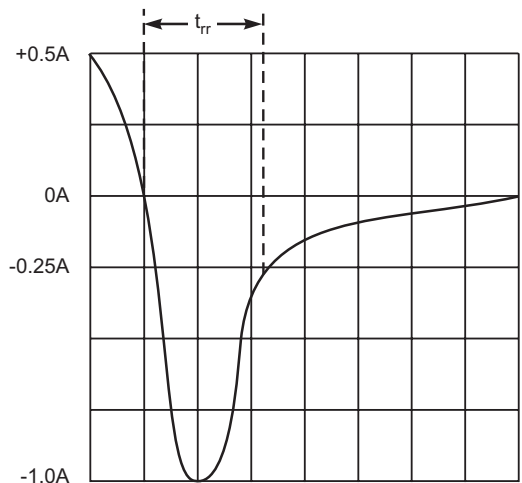


Fig. 4 Typical Junction Capacitance



- Notes:
1. Rise Time = 7.0ns max. Input Impedance = 1.0MΩ, 22pF.
 2. Rise Time = 10ns max. Input Impedance = 50Ω.



Set time base for 50/100 ns/cm

Fig. 5 Reverse Recovery Time Characteristic and Test Circuit

Ordering Information (Note 5)

| Device | Packaging | Shipping |
|------------|-----------|-------------------------|
| 1N4933G-A | DO-41 | 5K/Ammo Pack |
| 1N4933G-B | DO-41 | 1K/Bulk |
| 1N4933G-T | DO-41 | 5K/Tape & Reel, 13-inch |
| 1N4934G-A | DO-41 | 5K/Ammo Pack |
| 1N4934G-B | DO-41 | 1K/Bulk |
| 1N4934G-T | DO-41 | 5K/Tape & Reel, 13-inch |
| 1N4935G-A | DO-41 | 5K/Ammo Pack |
| 1N4935G-B | DO-41 | 1K/Bulk |
| 1N4935G-T | DO-41 | 5K/Tape & Reel, 13-inch |
| 1N4936G-A | DO-41 | 5K/Ammo Pack |
| 1N4936G-B | DO-41 | 1K/Bulk |
| 1N4936G-T | DO-41 | 5K/Tape & Reel, 13-inch |
| 1N4937G-A | DO-41 | 5K/Ammo Pack |
| 1N4937G-B | DO-41 | 1K/Bulk |
| 1N4937G-T | DO-41 | 5K/Tape & Reel, 13-inch |
| 1N4933GL-T | A-405 | 5K/Tape & Reel, 13-inch |
| 1N4934GL-T | A-405 | 5K/Tape & Reel, 13-inch |
| 1N4935GL-T | A-405 | 5K/Tape & Reel, 13-inch |
| 1N4936GL-T | A-405 | 5K/Tape & Reel, 13-inch |
| 1N4937GL-T | A-405 | 5K/Tape & Reel, 13-inch |

Notes: 5. For packaging details, visit our website at <http://www.diodes.com/datasheets/ap02008.pdf>