# 1N4933G thru 1N4937G

**Fast Recovery**
**Glass Passivated Recitifiers**

**Reverse Voltage - 50 to 600 Volts**
**Forward Current - 1.0 Amperes**

## Features

- Fast switching for high efficiency
- Low reverse leakage current
- High current capability
- Low forward voltage drop
- Low cost
- Meet UL flammability classification 94V-0

## Mechanical Data

- Case: JEDEC DO-41 molded plastic
- Polarity: Color band denotes cathode
- Mounting position: Any

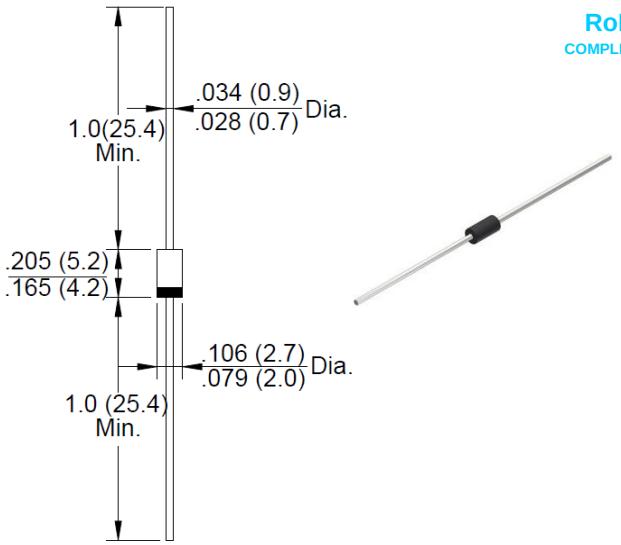
Note: Products with logo HY or hy are made byHY Electronic (Cayman) Limited.

## Applications

- For use in SMPS, high frequency inverters, PWM and polarity protection applications

## DO-41

RoHS COMPLIANT




Package Outline Dimensions in Inches (Millimeters)

## Maximum Ratings and Electrical Characteristics

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

| Characteristics | Symbol | 1N4933G | 1N4934G | 1N4935G | 1N4936G | 1N4937G | Unit |
|---|---|---|---|---|---|---|---|
| Maximum Repetitive Peak Reverse Voltage | $V_{RRM}$ | 50 | 100 | 200 | 400 | 600 | V |
| Maximum RMS Voltage | $V_{RMS}$ | 35 | 70 | 140 | 280 | 420 | V |
| Maximum DC Blocking Voltage | $V_{DC}$ | 50 | 100 | 200 | 400 | 600 | V |
| Maximum Average Forward Rectified Current @$T_A$=75℃ | $I_{(AV)}$ | 1.0 | | | | | A |
| Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method) | $I_{FSM}$ | 30 | | | | | A |
| Peak Forward Voltage at 1.0A DC (Note1) | $V_F$ | 1.3 | | | | | V |
| Maximum DC Reverse Current @$T_J$=25℃ | $I_R$ | 5.0 | | | | | μA |
| at Rated DC Blocking Voltage @$T_J$=100℃ | | 100 | | | | | |
| Maximum Reverse Recovery Time (Note 2) | Trr | 200 | | | | | nS |
| Typical Junction Capacitance (Note3) | $C_J$ | 15 | | | | | pF |
| Typical Thermal Resistance Junction to Ambient | $R_{\theta JA}$ | 50 | | | | | ℃/W |
| Operating Junction Temperature Range | $T_J$ | -55 to +150 | | | | | ℃ |
| Storage Temperature Range | $T_{STG}$ | -55 to +150 | | | | | ℃ |

Notes: 1. 300uS pulse width, 2%duty cycle.
2. Measured with IF=0.5A,IR=1A,IRR=0.25A .
3. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
4. The typical data above is for reference only.



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Fig. 1 - Forward Current Derating Curve

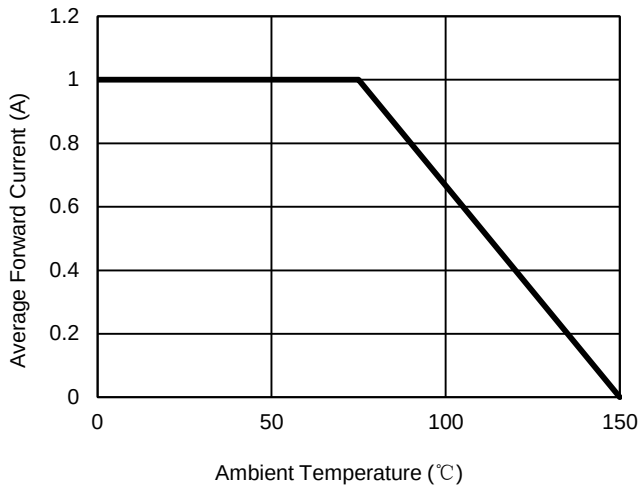



Fig. 2 - Maximum Non-Repetitive Surge Current

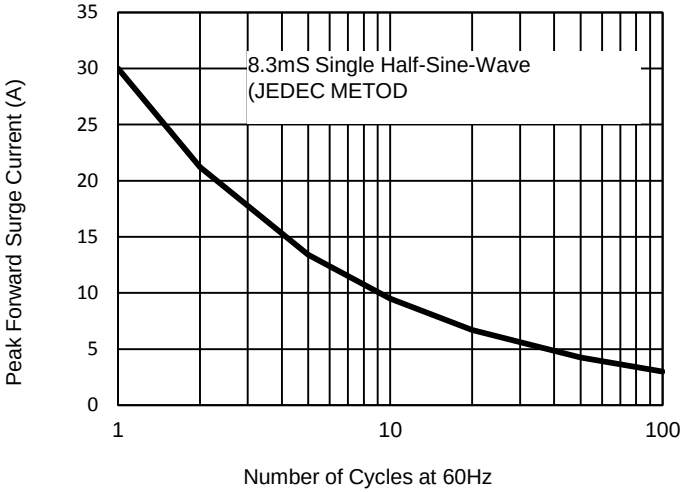



Fig. 3 - Typical Junction Capacitance

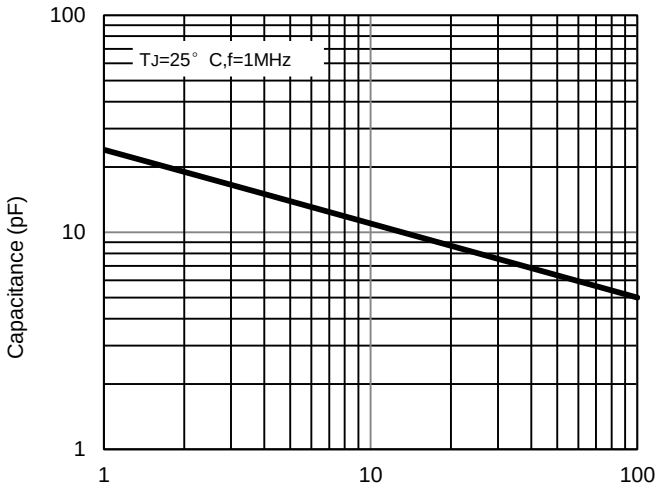
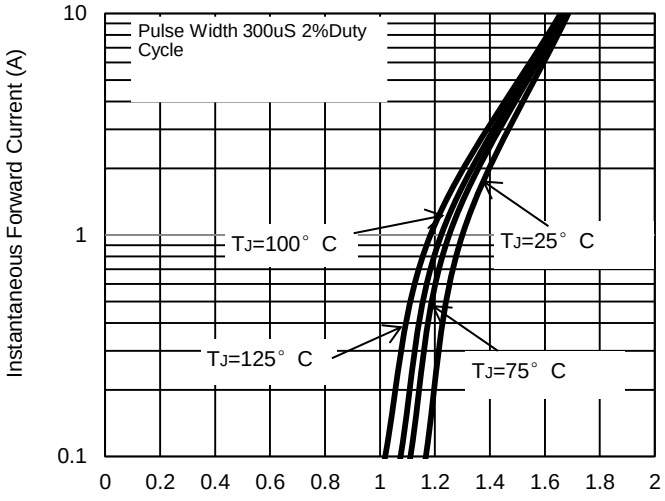



Fig. 4 - Typical Forward Characteristics




The curve above is for reference only.



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