# 1N4933G THRU 1N4937G

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

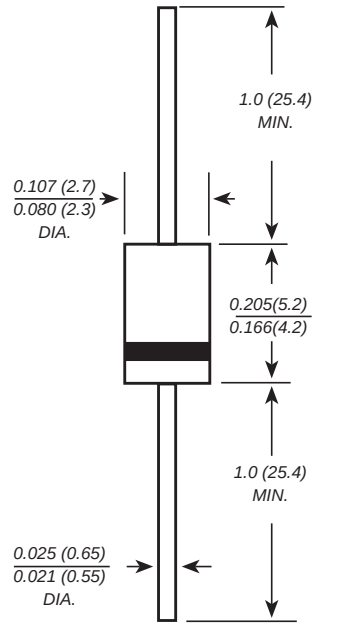
## FAST RECOVERY GLASS PASSIVATED RECTIFIERS

## Features

**DO-41**

RoHS COMPLIANT

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Idea for printed circuit board
- Fast switching for high efficiency
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed: 250℃/10 seconds at terminals




Dimensions in inches and (millimeters)

## Mechanical Data

**Case** : JEDEC DO-41 Molded plastic body
**Terminals** : Solder plated, solderable per MIL-STD-750,Method 2026
**Polarity** : Polarity symbol marking on body
**Mounting Position** : Any
**Weight** : 0.012 ounce, 0.33 grams

## Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unlss otherwise specified.

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

| Parameter | SYMBOLS | 1N4933G | 1N4934G | 1N4935G | 1N4936G | 1N4937G | UNITS |
|---|---|---|---|---|---|---|---|
| Marking Code | | MDD 1N4933G | MDD 1N4934G | MDD 1N4935G | MDD 1N4936G | MDD 1N4937G | |
| Maximum repetitive peak reverse voltage | $V_{RMM}$ | 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 at $T_A$=75℃ | $I_{(AV)}$ | 1.0 | | | | | A |
| Peak forward surge current 8.3ms single half sine-wave superimposed onrated load (JEDEC Method) | $I_{FSM}$ | 30 | | | | | A |
| Maximum instantaneous forward voltage at 1.0A | $V_F$ | 1.20 | | | | | V |
| Maximum DC reverse current $T_A$=25℃ at rated DC blocking voltage $T_A$=100℃ | $I_R$ | 5.0<br>50.0 | | | | | μA |
| Maximum reverse recovery time (NOTE 1) | trr | 200 | | | | | ns |
| Typical junction capacitance (NOTE 2) | $C_J$ | 15.0 | | | | | pF |
| Typical thermal resistance (NOTE 3) | $R_{\theta JA}$ | 50.0 | | | | | ℃/W |
| Operating junction and storage temperature range | $T_J$,$T_{STG}$ | -65 to +150 | | | | | ℃ |

**Note:**1.Reverse recovery condition $I_F$=0.5A,$I_R$=1.0A,Irr=0.25A
2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
3.Thermal resistance from junction to ambient at 0.375"(9.5mm)lead length,P.C.B. mounted



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## Ratings And Characteristic Curves

FIG. 1- FORWARD CURRENT DERATING CURVE

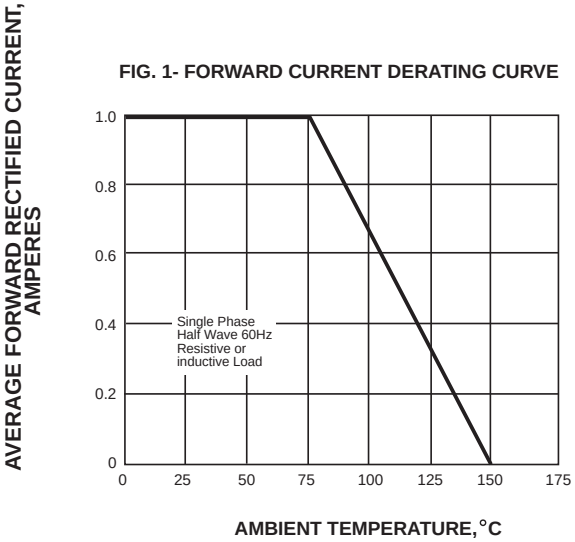



FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

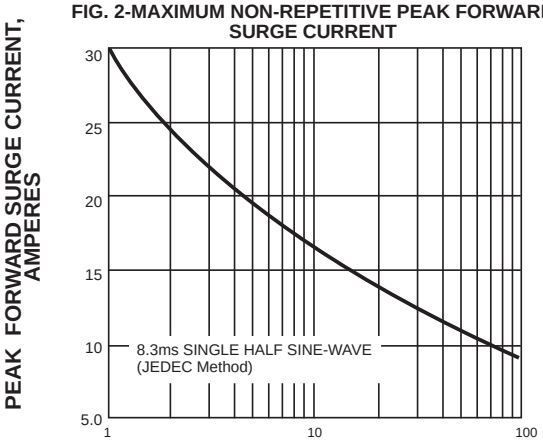



FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

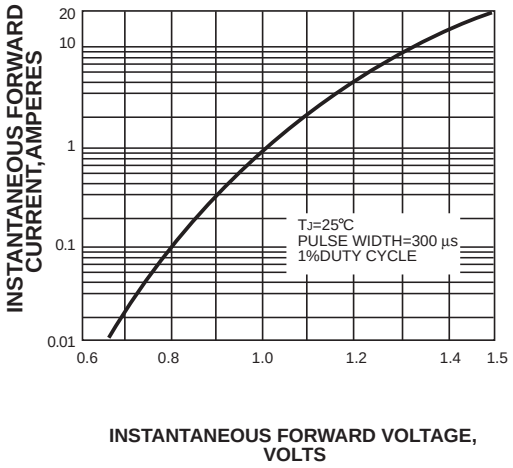



FIG. 4-TYPICAL REVERSE CHARACTERISTICS

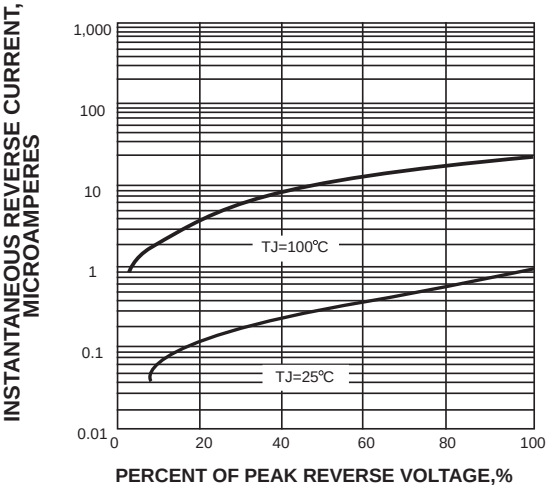



FIG. 5-TYPICAL JUNCTION CAPACITANCE

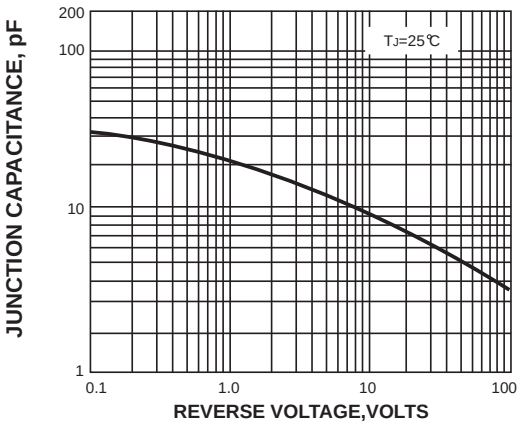
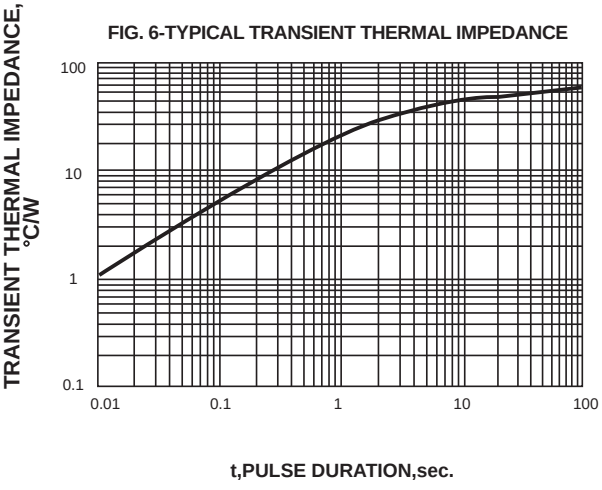



FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE




The curve above is for reference only.



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