

1N4933G THRU 1N4937G

FAST RECOVERY GLASS PASSIVATED RECTIFIER

VOLTAGE RANGE 50 to 600 Volts CURRENT 1.0 Ampere

FEATURES

- * High reliability
- * Low leakage

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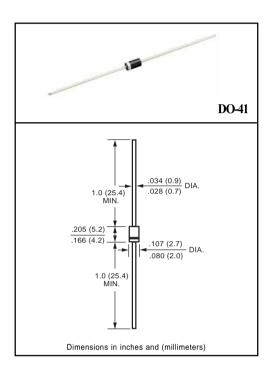
- * Low forward voltage drop
- * Glass passivated junction
- * High switch capability

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: Device has UL flammability classification 94V-O
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 0.35 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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



MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

| RATINGS | SYMBOL | 1N4933G | 1N4934G | 1N4935G | 1N4936G | 1N4937G | UNITS |
|---|----------|--------------|---------|---------|---------|---------|-------|
| Maximum Recurrent Peak Reverse Voltage | VRRM | 50 | 100 | 200 | 400 | 600 | Volts |
| Maximum RMS Voltage | VRMS | 35 | 70 | 140 | 280 | 420 | Volts |
| Maximum DC Blocking Voltage | VDC | 50 | 100 | 200 | 400 | 600 | Volts |
| Maximum Average Forward Rectified Current at TA = 55°C | lo | 1.0 | | | | | |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | IFSM | 30 | | | | | |
| Typical Junction Capacitance (Note 2) | CJ | 15 | | | | | |
| Operating and Storage Temperature Range | TJ, TSTG | -65 to + 150 | | | | | |

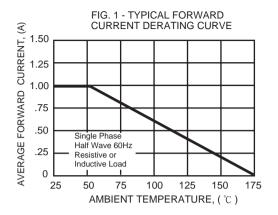
ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

| CHARACTERISTICS | SYMBOL | 1N4933G | 1N4934G | 1N4935G | 1N4936G | 1N4937G | UNITS |
|---|--------|---------|---------|---------|---------|---------|-------|
| Maximum Instantaneous Forward Voltage at 1.0A DC | VF | | Volts | | | | |
| Maximum DC Reverse Current at Rated DC Blocking Voltage TA = 25°C | lo. | 5.0 | | | | | uAmps |
| Maximum Full Load Reverse Current Full Cycle Average, .375" (9.5mm) lead length at TL = 55°C | - IR | 100 | | | | | uAmps |
| Maximum Reverse Recovery Time (Note 1) | trr | 200 | | | | | nSec |

NOTES: 1. Test Conditions: IF = 1.0A, VR = 30V

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RATING AND CHARACTERISTIC CURVES (1N4933G THRU 1N4937G)



www.DataSheet4U.coFiG. 3 - TYPICAL JUNCTION CAPACITANCE

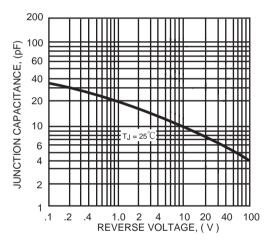
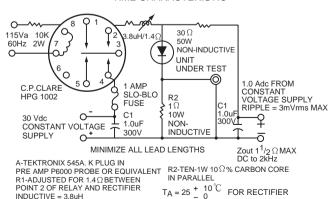


FIG. 5 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



INDUCTIVE = 3.8uH

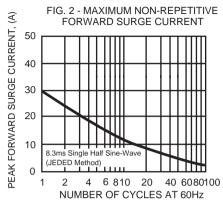


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD 3 **CHARACTERISTICS** INSTANTANEOUS FORWARD CURRENT, 20 10 1.0 TJ = 25°C .1 Pulse Width = 300us 1% Duty Cycle .01 .8 1.0 1.2 1 4 INSTANTANEOUS FORWARD VOLTAGE, (V)

