

1N4933G THRU 1N4937G

FAST RECOVERY GLASS PASSIVATED RECTIFIER

VOLTAGE RANGE 50 to 600 Volts CURRENT 1.0 Ampere

FEATURES

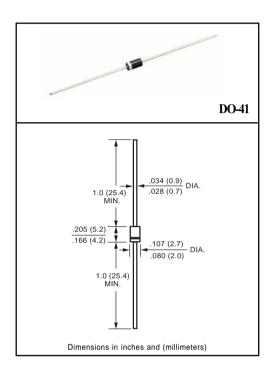
- * High reliability
- * Low leakage
- * Low forward voltage drop
- * Glass passivated junction
- * High switch capability

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

RATING AND CHARACTERISTIC CURVES (1N4933G THRU 1N4937G)

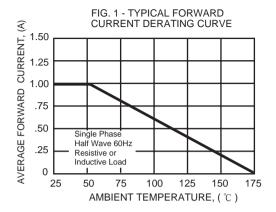


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

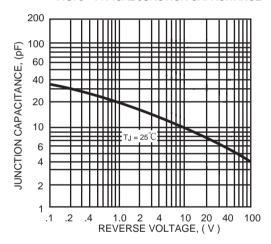


FIG. 5 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

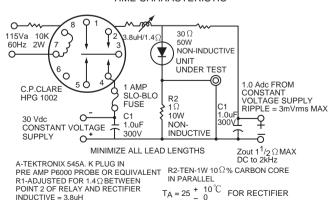


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

50

40

40

8.3ms Single Half Sine-Wave (JEDED Method)

1 2 4 6 810 20 40 6080100

NUMBER OF CYCLES AT 60Hz

FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

10

T_J = 25°C
Pulse Width = 300us
1% Duty Cycle

1.0

INSTANTANEOUS FORWARD VOLTAGE, (V)

1.2

1 4

.8

