

1N4933G THRU 1N4937G

FMS

1.0 AMP GLASS PASSIVATED FAST RECOVERY RECTIFIERS



FEATURES

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

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Axial leads, solderable per MIL-STD-202, method 208 guranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 0.34 grams

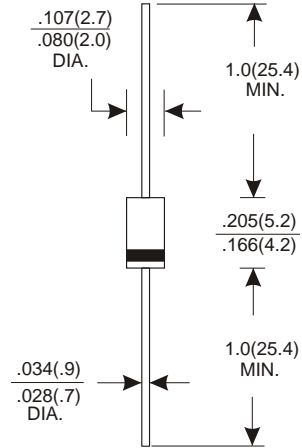
VOLTAGE RANGE

50 to 600 Volts

CURRENT

1.0 Ampere

DO-41



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	1N4933G	1N4934G	1N4935G	1N4936G	1N4937G	UNITS	
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	V	
Maximum RMS Voltage	35	70	140	280	420	V	
Maximum DC Blocking Voltage	50	100	200	400	600	V	
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at Ta=55°C						1.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)						30	A
Maximum Instantaneous Forward Voltage at 1.0A						1.2	V
Maximum DC Reverse Current Ta=25°C						5.0	mA
at Rated DC Blocking Voltage Ta=100°C						100	mA
Maximum Reverse Recovery Time (Note 1)						200	nS
Typical Junction Capacitance (Note 2)						15	pF
Operating and Storage Temperature Range Tj, Tstg						-65 — +175	°C

NOTES:

- Reverse Recovery Time test condition: IF=1.0A, VR=30V.
- Measured at 1MHz and applied reverse voltage of 4.0V D.C.

RATING AND CHARACTERISTIC CURVES (1N4933G THRU 1N4937G)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

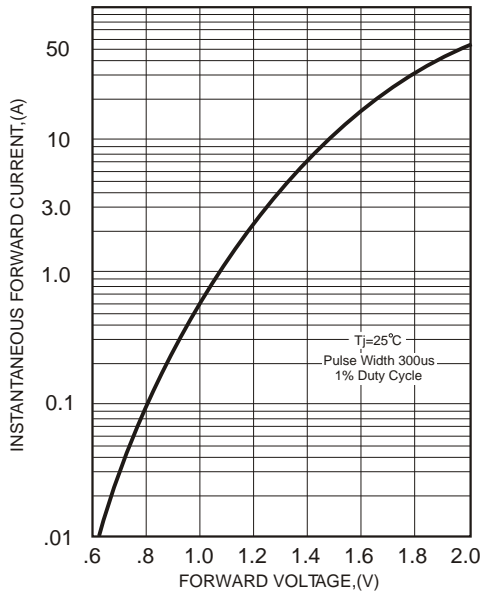


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

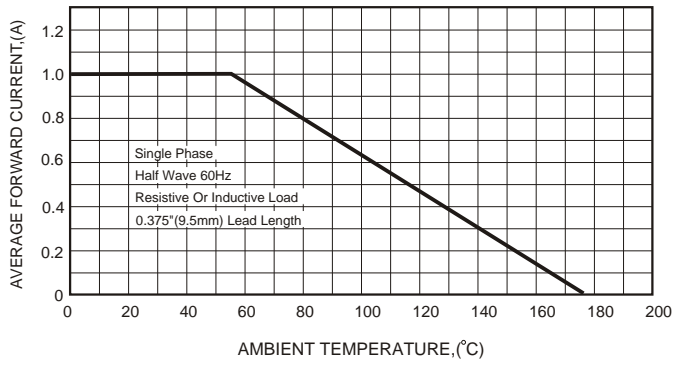
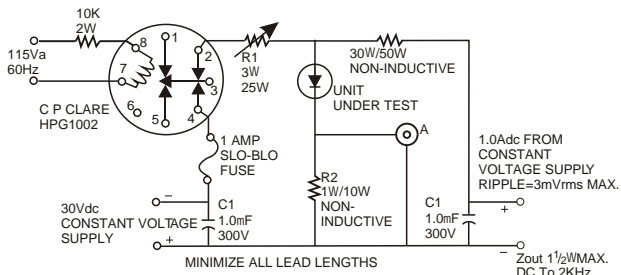


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



A-TEKTRONIX 545A, K PLUG IN PRE AMP P6000 PROBE OR EQUIVALENT
 R1- ADJUSTED FOR 14 BETWEEN POINT 2 OF RELAY AND RECTIFIER INDUCTIVE=3.8mH
 R2- TEN 1W 10W 1% CARBON CORE IN PARALLEL
 $T_A = 25 \pm 10^\circ\text{C}$ FOR RECTIFIER

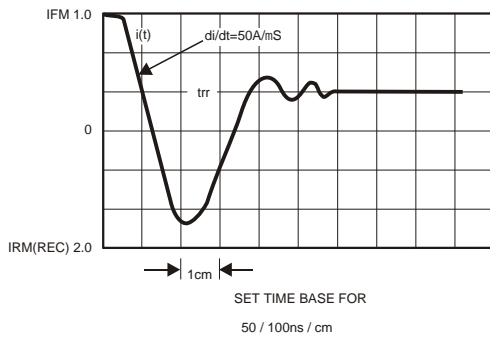


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

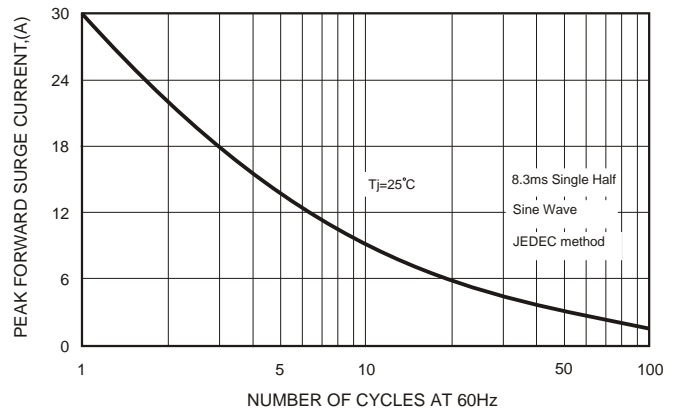


FIG.5-TYPICAL JUNCTION CAPACITANCE

