



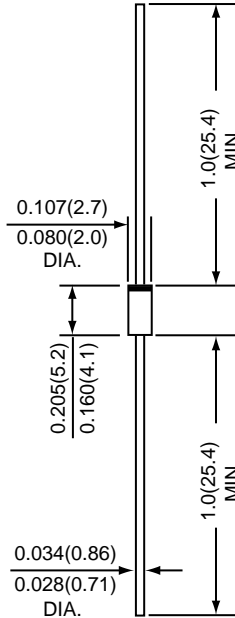
# 1N4933 THRU 1N4937

## FAST RECOVERY RECTIFIER

Reverse Voltage - 50 to 600 Volts

Forward Current - 1.0 Ampere

DO-204AL



\*Dimensions in inches and (millimeters)



### FEATURES

- \* The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- \* Low cost
- \* Low leakage
- \* Low forward voltage drop
- \* High current capability

### MECHANICAL DATA

**Case :** JEDEC DO-204AL molded plastic

**Terminals :** Plated axial leads , solderable per MIL-STD-750, Method 2026

**Polarity :** Color band denotes cathode end

**Mounting Position :** Any

**Weight :** 0.012 ounces , 0.3 gram

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.	SYMBOLS	1N4933	1N4934	1N4935	1N4936	1N4937	UNITS
Maximum repetitive 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 0.375" (9.5mm) lead length at TL=75°C	I(AV)	1.0					Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	30					Amps
Maximum instantaneous forward voltage at 1.0 A	VF	1.2					Volts
Maximum DC reverse current at rated DC blocking voltage	IR	5.0 100					uA
Maximum reverse recovery time (NOTE 1)	trr	200					nS
Typical junction capacitance (NOTE 2)	CJ	15					pF
Operating junction and storage temperature range	TJ,TSTG	-65 to +150					°C

NOTES : (1) Test condition : IF = 1.0A, VR = 30 V

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

# RATINGS AND CHARACTERISTIC CURVES 1N4933 THRU 1N4937

FIG.1 - FORWARD CURRENT DERATING CURVE

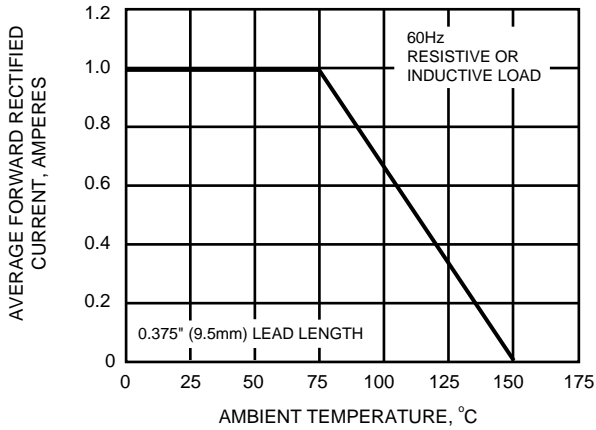


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

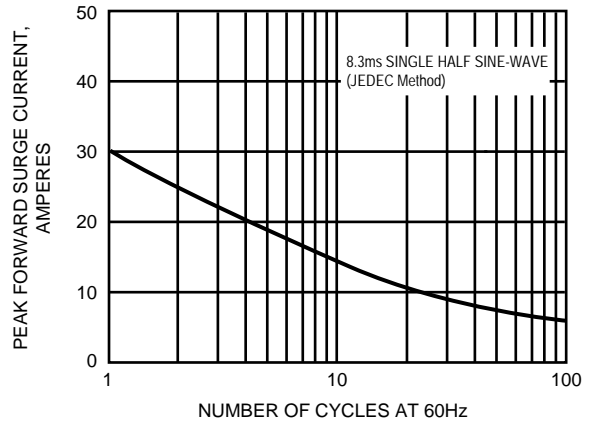


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

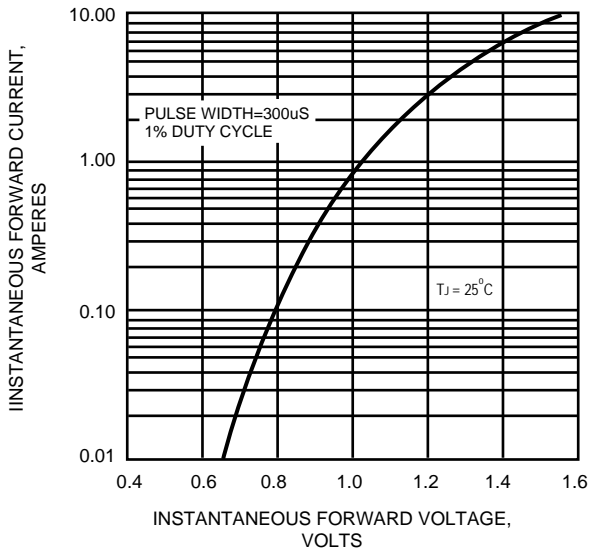


FIG.5 - TYPICAL JUNCTION CAPACITANCE

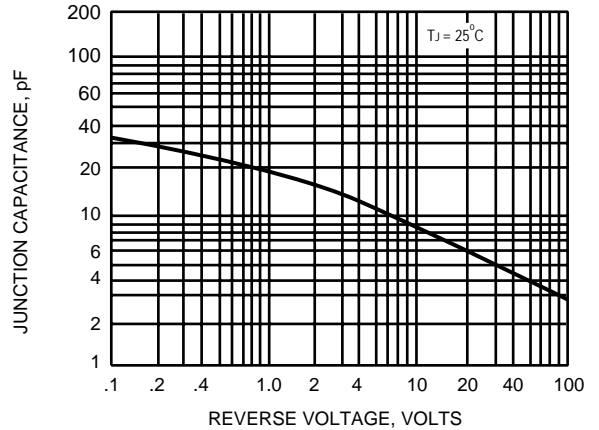
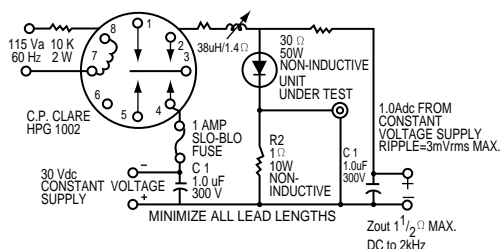


FIG.5 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



OR EQUIVALENT IN PARALLEL  
 R1 - ADJUSTED FOR 1.4 BETWEEN PONT 2 OF RELAY AND RECTIFIER INDUCTIVE = 3.8µH  
 R2 - TEN - 1 W 10 Ω % CARBON CORE  
 TA = 25 +10°C -0 FOR RECTIFIER

