DEC

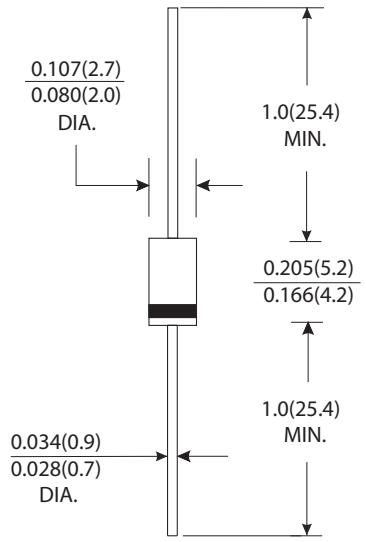
1N4933 THRU 1N4937

CURRENT 1.0 Ampere
VOLTAGE 50 to 600 Volts

Features

- Plastic package has Underwrites Laboratory Flammability Classification 94V-0
- Fast switching speed
- Construction utilizes void-free molded plastic technique
- 1.0A operation at TA=75℃ with to terminal runaway
- High temperature soldering guaranteed : 250℃/10 seconds, 0.375"(9.5mm) lead length, 5 lbs.(2.3kg) tension.

DO-41



Dimensions in inches and (millimeters)

Mechanical Data

- Case : JEDEC DO-41 molded plastic body
- Terminals : Plated axial lead solderable per MIL-STD-750, method 2026
- Polarity : Color band denotes cathode end
- Mounting Position : Any
- Weight : 0.012 ounce, 0.34 gram

Maximum Ratings And Electrical Characteristics

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

	Symbols	1N4933	1N4934	1N4935	1N4936	1N4937	Units
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length TA=75℃	$I_{(AV)}$	1.0					Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method) at TA=75℃	I_{FSM}	30.0					Amps
Maximum instantaneous forward voltage at 1.0A	V_F	1.3					Volts
Maximum DC reverse current at rated DC blocking voltage	I_R	5.0					μ A
Maximum full load reverse current full cycle average. 0.375"(9.5mm) lead length at TL=55℃		100					
Maximum reverse recovery time (Note 1)	Trr	150					ns
Typical junction capacitance (Note 2)	C_J	15.0					pF
Operating junction and storage temperature range	T_J T_{STG}	-65 to +150					℃

Notes:
(1) Test conditions: I_F=1.0A, V_R=30V, di/dt=50A/μ S, and Irr=10%I_{RM}.
(2) Measured at 1MHz and applied reverse voltage of 4.0 Volts.

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RATINGS AND CHARACTERISTIC CURVES 1N4933 THRU 1N4937

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

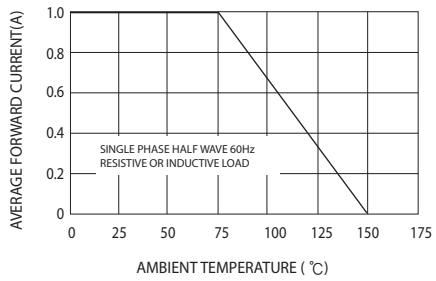


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

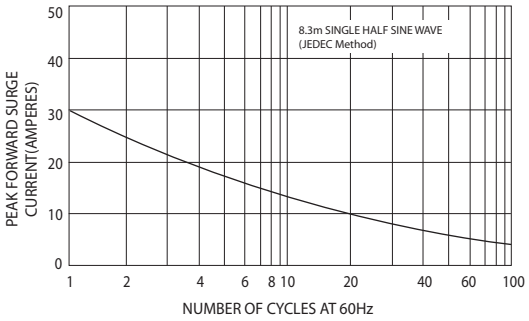


FIG.3-TYPICAL JUNCTION CAPACITANCE

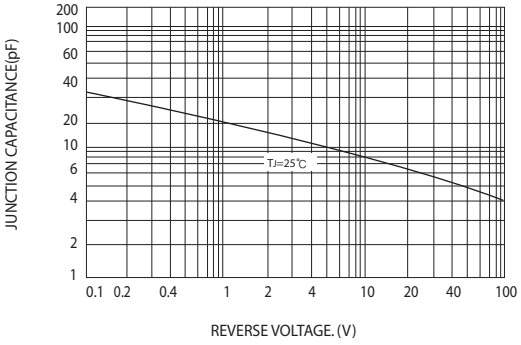


FIG.4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

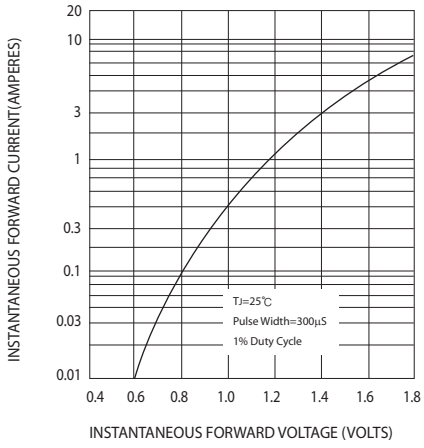
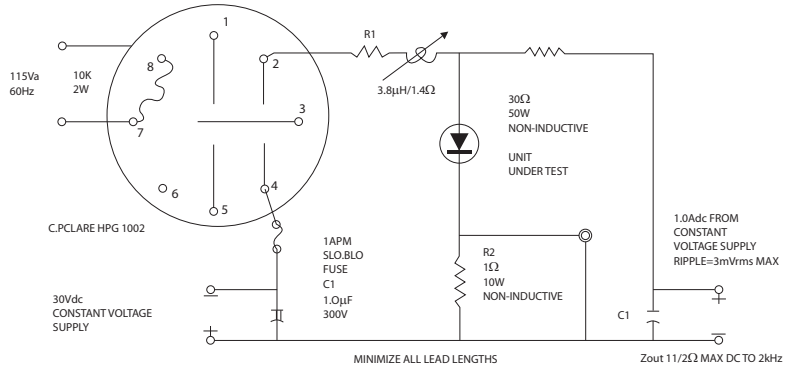
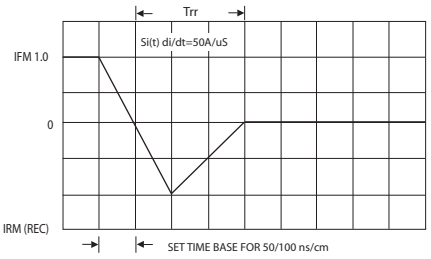


FIG.5-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC





A. TEKTRONIX 545A.K PLUG IN PRE AMP P6000 PROBE OR EQUIVALENT R1-ADJUSTED FOR 1.4Ω BETWEEN POINT 2 OF RELAY AND RECTIFIER INDUCTIVE=3.8uH
R2-TEN-1W 10Ω2% CARBON CORE IN PARALLEL TA=25 $^{+10℃}_{-0}$ FOR RECTIFIER