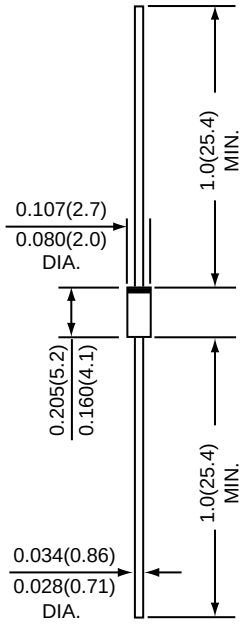
1N4933 THRU 1N4937

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 ounes , 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	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 at T_L=75°C	$I_{(AV)}$	1.0					Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30					Amps
Maximum instantaneous forward voltage at 1.0 A	V_F	1.2					Volts
Maximum DC reverse current at rated DC blocking voltage T_A=25°C T_A=100°C	I_R	5.0 100					uA
Maximum reverse recovery time (NOTE 1)	trr	200					nS
Typical junction capacitance (NOTE 2)	C_J	15					pF
Operating junction and storage temperature range	T_J,T_{STG}	-65 to +150					°C

NOTES : (1) Test condition : I_F = 1.0A, V_R = 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

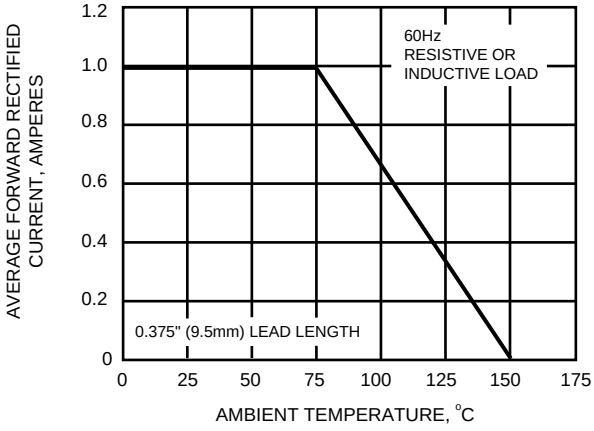


FIG.2 - MAXIMUM NON-REPETITIVE
PEAK FORWARD SURGE CURRENT

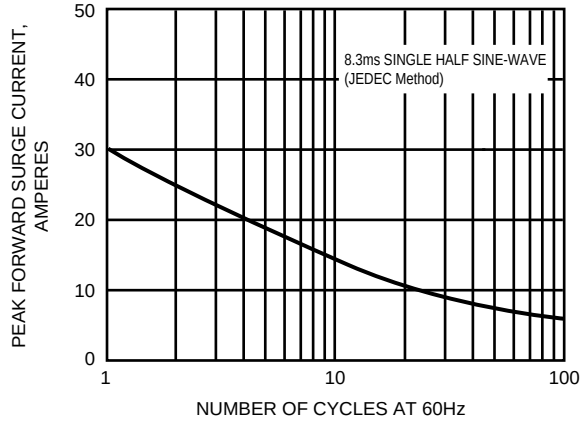


FIG.3 - TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

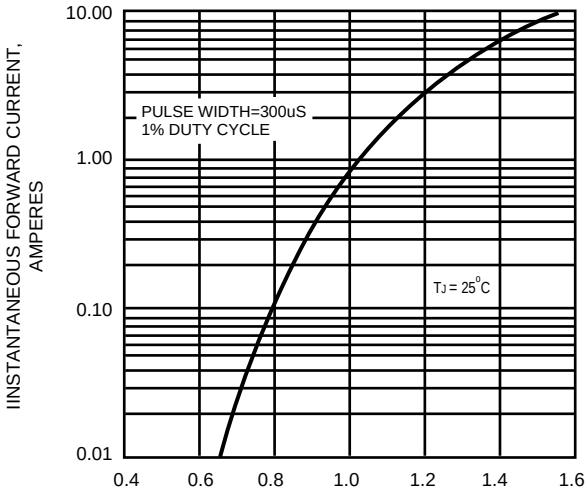


FIG.5 - TYPICAL JUNCTION CAPACITANCE

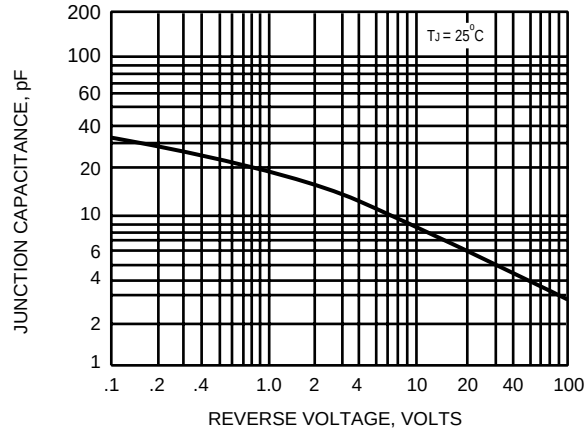
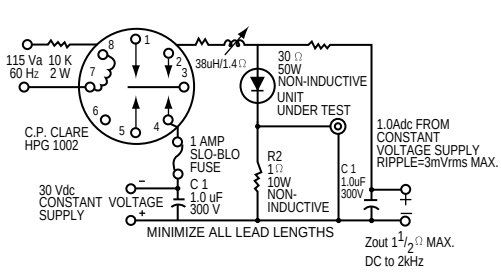
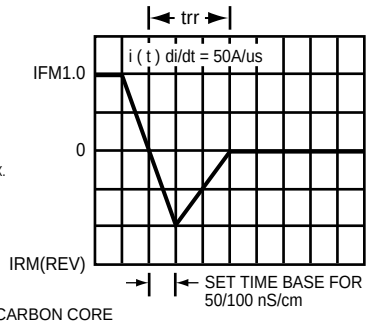


FIG.5 - TEST CIRCUIT DIAGRAM AND REVERSE
RECOVERY TIME CHARACTERISTICS





OR EQUIVALENT IN PARALLEL
R1 - ADJUSTED FOR 1.4 BETWEEN
PONT 2 OF RELAY AND RECTIFIER
INDUCTIVE = 3.8uH

R2 - TEN - 1 W 10 Ω % CARBON CORE

TA = 25^{+10}_{-0}°C FOR RECTIFIER