JGD

1N4933G THRU 1N4937G

1.0 AMP. FAST RECOVERY RECTIFIERS

VOLTAGE RANGE
50 to 600 Volts
CURRENT
1.0 Amperes

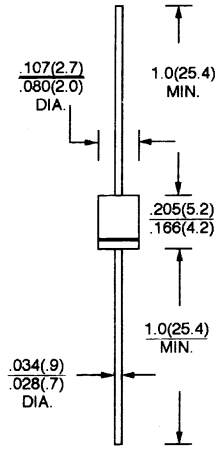
FEATURES

* Low forward voltage drop
* High current capability
* High reliability
* High surge current capability

MECHANICAL DATA

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

DO-41



Dimensions in inches and (milimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	SYMBOLS	1N4933G	1N4934G	1N4935G	1N4936G	1N4937G	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	V
Maximum D.C Blocking Voltage	V_{DC}	50	100	200	400	600	V
Maximum Average Forward Rectified Current .375" (9.5mm) lead length @ $T_A = 55℃$	$I_{F(AV)}$	1.0					A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30					A
Maximum Instantaneous Forward Voltage at 1.0A	V_F	1.2					V
Maximum D.C Reverse Current @ $T_A = 25℃$ at Rated D.C Blocking Voltage @ $T_A = 100℃$	I_R	5.0 100					μA μA
Maximum Reverse Recovery Time (Note 1)	T_{RR}	150					nS
Typical Junction Capacitance (Note 2)	C_J	15					pF
Operating Temperature Range	T_J	– 65 to + 150					℃
Storage Temperature Range	T_{STG}	– 65 to + 150					℃

NOTES: 1. Reverse Recovery Test Conditions: $I_F = 0.5A$, $I_R = 1.0A$, $I_{RR} = 0.25A$.
2. Measured at 1 MHz and applied reverse voltage of 4.0V D.C.

RATINGS AND CHARACTERISTIC CURVES (1N4933G THRU 1N4937G)

FIG.1 – TYPICAL FORWARD CURRENT DERATING CURVE

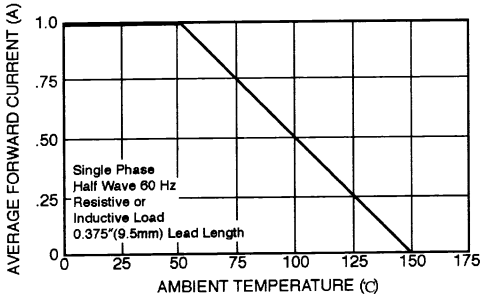


FIG.2 – MAXIMUM NON – REPETITIVE FORWARD SURGE CURRENT

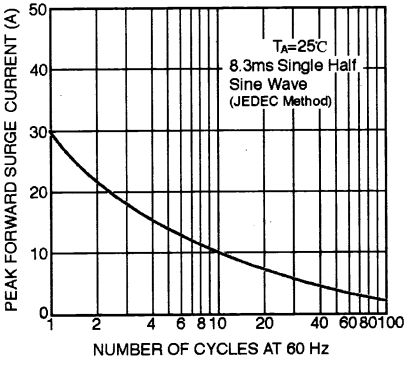


FIG.3 – TYPICAL FORWARD CHARACTERISTICS

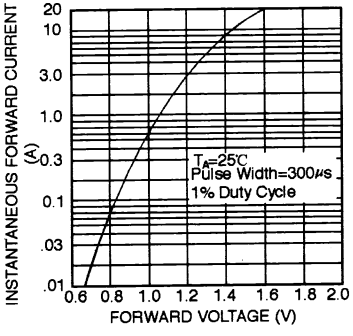


FIG.4 – TYPICAL JUNCTION CAPACITANCE

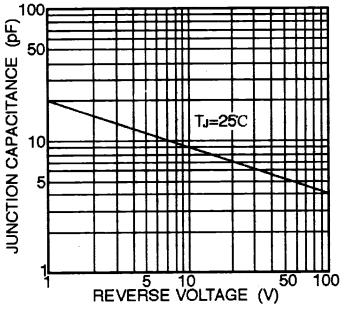


FIG.5 – TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS