

DATA SHEET

1N4933~1N4937

FAST RECOVERY PLASTIC RECTIFIER

VOLTAGE 50 to 600 Volts **CURRENT** 1.0 Amperes

DO-41

Unit: inch(mm)

FEATURES

- High current capability.
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228
- Fast Recovery for high efficiency.
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

MECHANICAL DATA

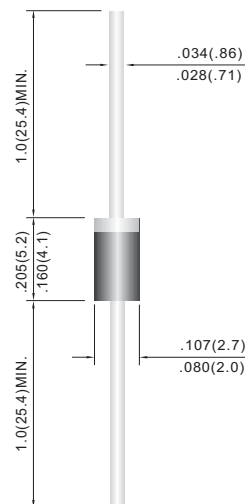
Case: Molded plastic, DO-41

Terminals: Axial leads, solderable to MIL-STD-202G, Method 208

Polarity: Color Band denotes cathode end

Mounting Position: Any

Weight: 0.012 ounce, 0.3 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.

PARAMETER	SYMBOL	1N4933	1N4934	1N4935	1N4936	1N4937	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 DC Blocking Voltage	V_{DC}	50	100	200	400	600	V
Maximum Average Forward Current .375"(9.5mm) lead length at $T_A=55^{\circ}C$	I_{AV}	1.0					A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	30					A
Maximum Forward Voltage at 1.0A	V_F	1.2					V
Maximum DC Reverse Current at $T_A=25^{\circ}C$ Rated DC Blocking Voltage $T_A=100^{\circ}C$	I_R	5.0 500					μA
Maximum Reverse Recovery Time (Note 1)	T_{RR}	200					ns
Typical Junction capacitance (Note 2)	C_J	12					pF
Typical Junction Resistance(Note 3)	$R_{\theta JA}$	41					$^{\circ}C / W$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 TO +150					$^{\circ}C$

NOTES:1. Reverse Recovery Test Conditions: $I_F=.5A$, $I_R=1A$, $I_{rr}=.25A$

2. Measured at 1 MHz and applied reverse voltage of 4.0 VDC

3. Thermal resistance from junction to ambient and from junction to lead length 0.375"(9.5mm) P.C.B. mounted

RATING AND CHARACTERISTIC CURVES

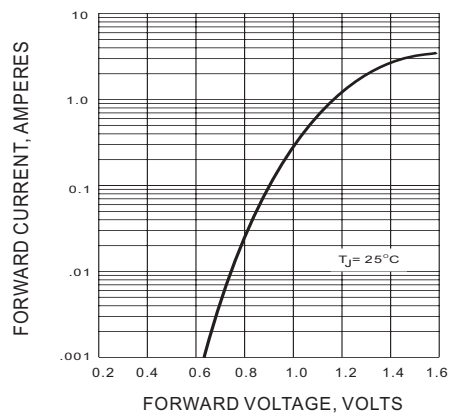


FIG.1 FORWARD CHARACTERISTIC

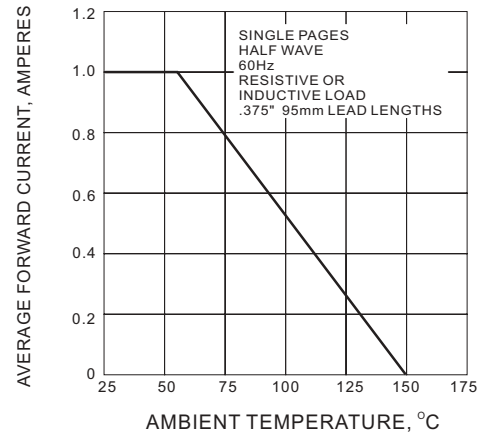


FIG.2 FORWARD CURRENT DERATING CURVE

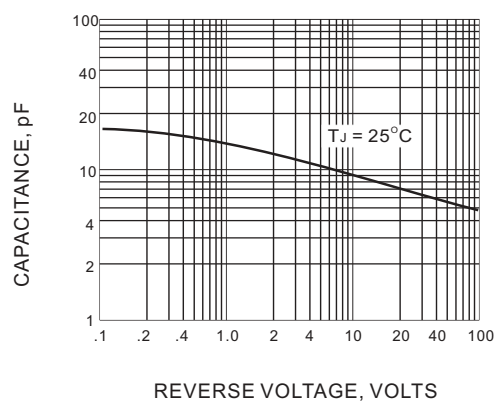


FIG.3 TYPICAL JUNCTION CAPACITANCE

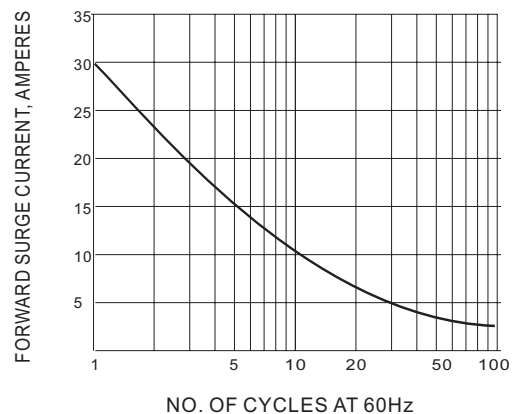


FIG.4 PEAK FORWARD SURGE CURRENT