

1N4933 THRU 1N4937

FAST RECOVERY RECTIFIERS

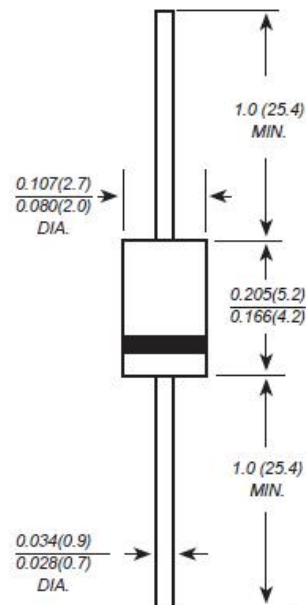
Reverse Voltage - 50 to 600 Volts Forward Current - 1.0 Ampere

FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Fast switching for high efficiency
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 250°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

Mechanical Data

- ◆ Case: DO-41 molded plastic body
- ◆ Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
- ◆ Polarity: Color band denotes cathode end
- ◆ Mounting position: Any
- ◆ Weight: 0.26 grams

DO-41

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	1N 4933	1N 4934	1N 4935	1N 4936	1N 4937	UNIT
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 $T_A=75^\circ\text{C}$	$I_{(AV)}$	1.0					Amp
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30.0					Amps
Maximum instantaneous forward voltage at 1.0A	V_F	1.2					VOLTS
Maximum DC Reverse Current $T_A=25^\circ\text{C}$ at Rated DC blocking voltage $T_A=100^\circ\text{C}$	I_R	5.0 50.0					μA
Maximum reverse recovery time (NOTE 1)	t_{rr}	200					ns
Typical Junction Capacitance (Note 1)	C_J	15.0					pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	50.0					$^\circ\text{C}/\text{W}$
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +150					$^\circ\text{C}$

Note: 1. Reverse recovery condition $I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$

2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

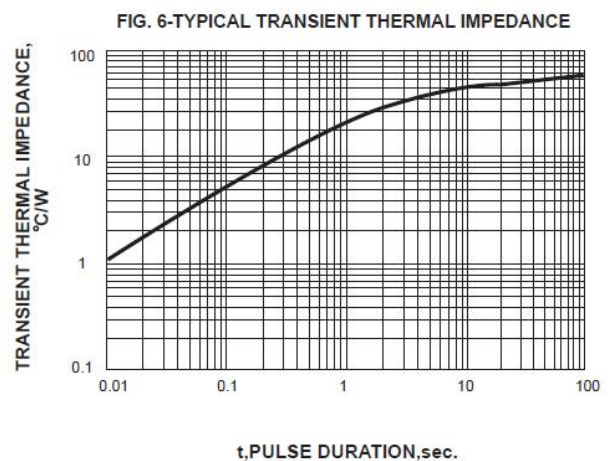
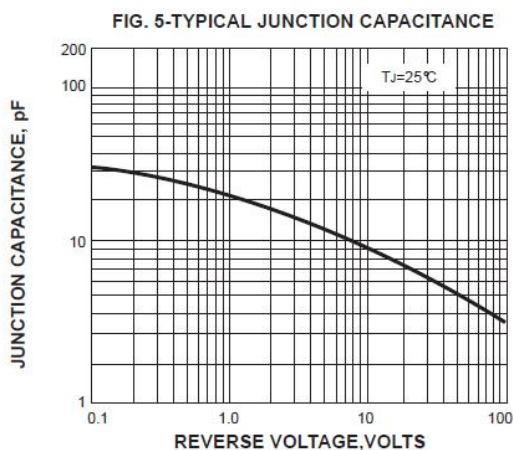
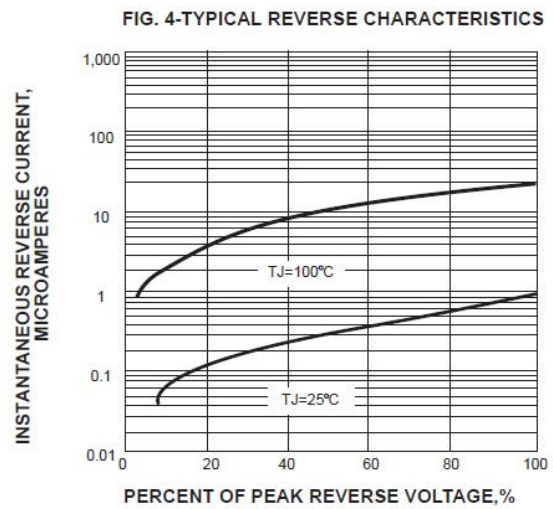
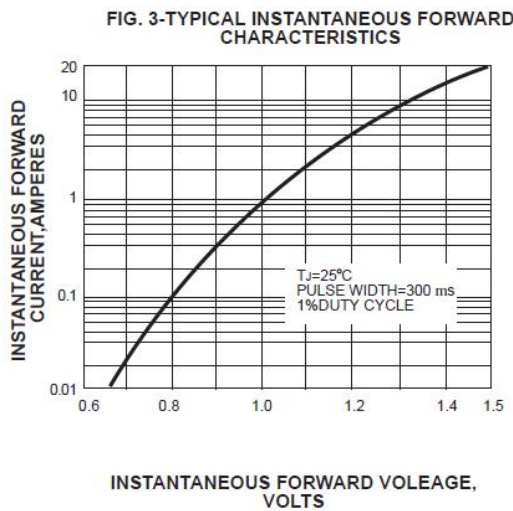
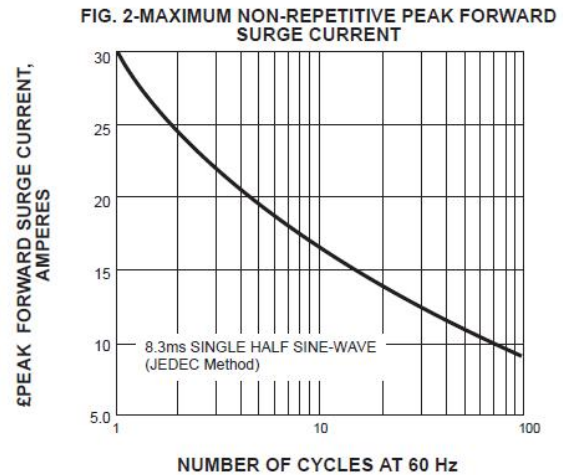
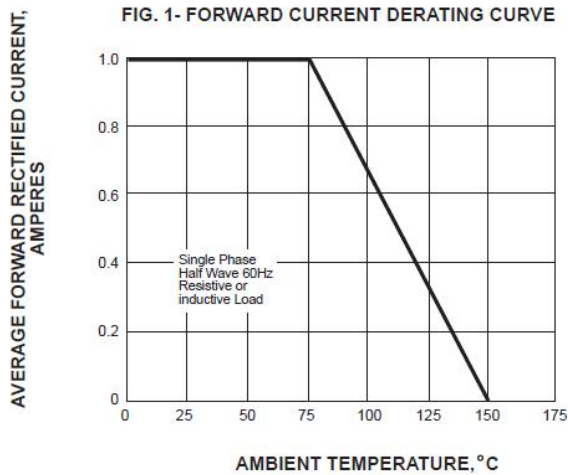
3. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

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RATING AND CHARACTERISTIC CURVES 1N4933 THRU 1N4937



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.