

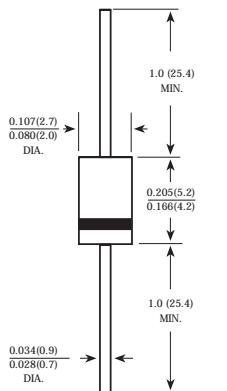


1N4933 THRU 1N4937

FAST RECOVERY RECTIFIERS

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

DO-41



Dimensions in inches and (millimeters)

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: 0.012 ounce, 0.33 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

	SYMBOLS	1N 4933	1N 4934	1N 4935	1N 4936	1N 4937	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 TA=75°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 TA=25°C at rated DC blocking voltage TA=100°C	I _R			5.0			mA
Maximum reverse recovery time (NOTE 1)	t _{rr}			200			ns
Typical junction capacitance (NOTE 2)	C _J			15.0			pF
Typical thermal resistance (NOTE 3)	R _{qJA}			50.0			°C/W
Operating junction and storage temperature range	T _{J,T_{STG}}			-65 to +150			°C

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

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

RATINGS AND CHARACTERISTIC CURVES 1N4933 THRU 1N4937

AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES

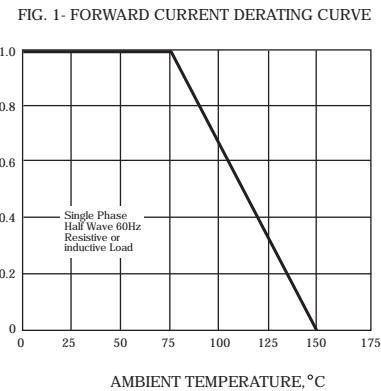
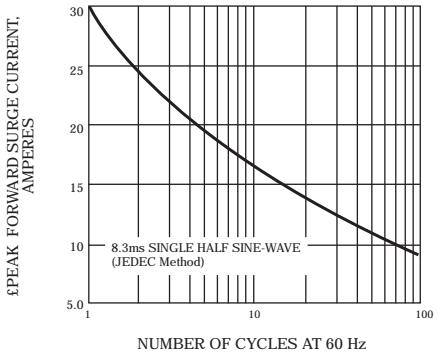


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



INSTANTANEOUS FORWARD CURRENT, AMPERES

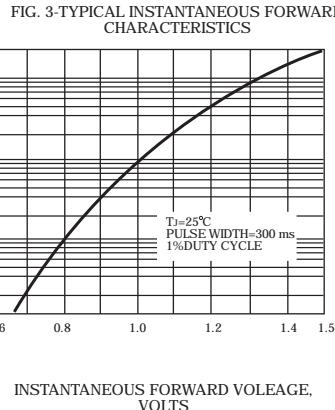
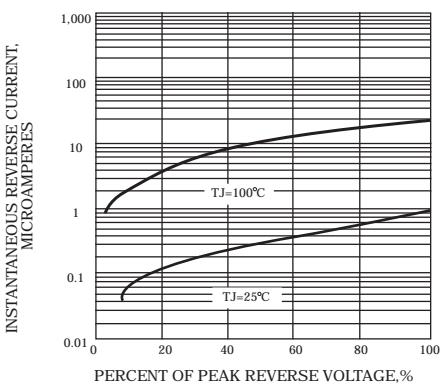
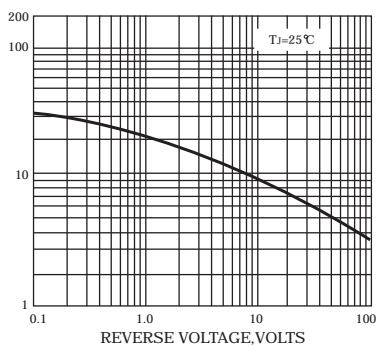


FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF



TRANSIENT THERMAL IMPEDANCE, °C/W

