

1N4933 THRU 1N4937

FAST SWITCHING PLASTIC RECTIFIERS

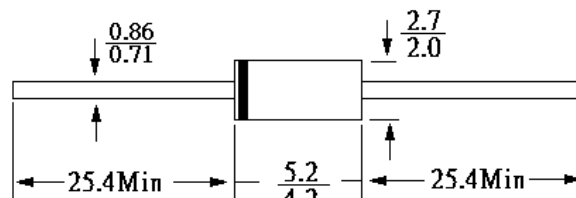
Reverse Voltage – 50 to 600 Volts

Forward Current – 1.0 Ampere

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Fast switching for high efficiency
- Construction utilizes void-free molded plastic technique
- 1.0 ampere operation at $T_A = 75^{\circ}\text{C}$ with no thermal runaway
- High temperature soldering guaranteed:
250°C/10 seconds, 0.375" (9.5mm) lead length,
5 lbs. (2.3kg) tension
- Case : Molded plastic, DO-41

DO-41



Dimensions in mm

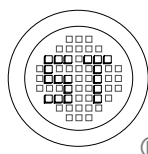
Absolute Maximum Ratings and Characteristics

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_{CD}	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					Amp
Peak forward surge current 8.3mS single half sine-wave superimposed on rated load (MIL-STD-750D 4066 method) at $T_A = 75^{\circ}\text{C}$	I_{FSM}	30					Amps
Maximum instantaneous forward voltage at 1A	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	5 100					μA
Maximum reverse recovery time (Note 1) $T_J = 25^{\circ}\text{C}$	T_{rr}	200					nS
Typical junction capacitance (Note 2)	C_J	15					pF
Typical thermal resistance (Note 3)	$R_{\theta JA}$ $R_{\theta JL}$	55 25					$^{\circ}\text{C/W}$
Operating junction and storage temperature range	T_J, T_S	-50 to +150					$^{\circ}\text{C}$

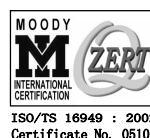
Notes:

- (1) Reverse recovery test conditions: $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{rr} = 0.25\text{A}$.
- (2) Measured at 1.0MHz and applied reverse voltage of 4.0 volts.
- (3) Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5mm) lead length, P.C.B.mounted.



SEMTECH ELECTRONICS LTD.

(Subsidiary of Semtech International Holdings Limited, a company
listed on the Hong Kong Stock Exchange, Stock Code: 724)



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