

Silicon Diode

1N4933

50V/1A

DATASHEET

OEM – Fairchild

Source: Fairchild Databook 1978

1N4933 – 1N4937

FAST RECOVERY 1 A SILICON RECTIFIERS

- t_{rr} ... 200 ns (MAX)
- GLASS PACKAGE

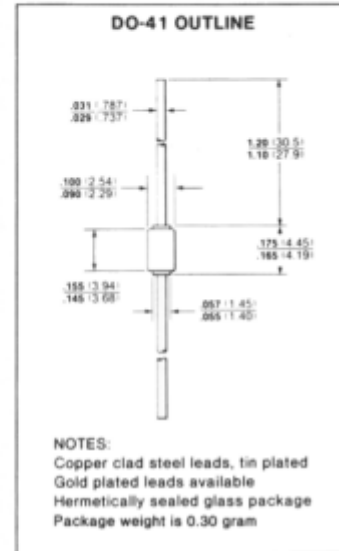
ABSOLUTE MAXIMUM RATINGS

Temperatures

Storage Temperature Range	-65°C to +175°C
Maximum Junction Operating Temperature	+150°C
Lead Temperature	+260°C

Maximum Voltages and Currents

VRRM	Peak Repetitive Reverse Voltage	1N4933	50 V
VRWM	Working Peak Reverse Voltage	1N4934	100 V
VR	DC Blocking Voltage	1N4935	200 V
		1N4936	400 V
		1N4937	600 V
VR(rms)	rms Reverse Voltage	1N4933	35 V
		1N4934	70 V
		1N4935	140 V
		1N4936	280 V
		1N4937	420 V
Io	Average Rectified Forward Current (Note 2)		1 A
IfSM	Peak Forward Surge Current		30 A



ELECTRICAL CHARACTERISTICS (25°C Ambient Temperature unless otherwise noted)

SYMBOL	CHARACTERISTIC	TYP	MAX	UNITS	TEST CONDITIONS
V _F	Forward Voltage	1.1	1.2	V	I _O = 1.0 A, T _A = 75°C
V _F	Instantaneous Forward Voltage	0.95	1.2	V	I _F = 1 A
I _R	Reverse Current	0.10	5.0	μA	Rated dc Voltage
		1.0	100	μA	Rated dc Voltage, T _A = 100°C
t _{rr}	Reverse Recovery Time (Note 3)	150	200	ns	I _F = 1.0 A, V _R = 30 V
I _{RM}	Reverse Recovery Current (Note 3)	1.5	2.0	A	I _F = 1.0 A, V _R = 30 V

NOTES:

- These are limiting values above which the serviceability of the rectifier may be impaired.
- Derate linearly above T_A = 75°C (Note 3).
- For product family characteristic curves and test circuit, refer to Chapter 4, D17.

CURVE SET NUMBER D17
FAST RECOVERY 1 A RECTIFIER

