

# Silicon Diode

## **1N4937**

600V/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

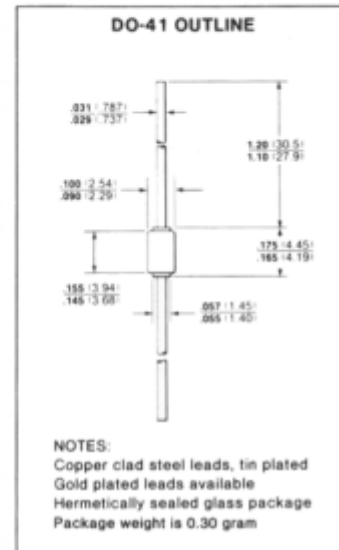
##### Temperatures

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
		1N4933	35 V
		1N4934	70 V
VR(rms)	rms Reverse Voltage	1N4935	140 V
		1N4936	280 V
		1N4937	420 V

$I_o$	Average Rectified Forward Current (Note 2)		1 A
$I_{FSM}$	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, $T_A = 75^\circ$ C
$V_F$	Instantaneous Forward Voltage	0.95	1.2	V	$I_F = 1$ A
$I_R$	Reverse Current	0.10	5.0	$\mu$ A	Rated dc Voltage
		1.0	100	$\mu$ A	Rated dc Voltage, $T_A = 100^\circ$ 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:

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

**CURVE SET NUMBER D17**  
**FAST RECOVERY 1 A RECTIFIER**

