

Silicon Diode

1N625

20V/400mA

www.semicon-data.de
DATASHEET

OEM – Fairchild

Source: Fairchild Databook 1978

1N625 through 1N629

GENERAL PURPOSE DIODES

DIFFUSED SILICON PLANAR

- $V_F \dots 1.5 \text{ V (MAX) @ } 4.0 \text{ mA}$
- $I_R \dots 1.0 \mu\text{A (MAX) @ WIV}$

ABSOLUTE MAXIMUM RATINGS (Note 1)

Temperatures

Storage Temperature Range	-65°C to +200°C
Maximum Operating Junction Temperature	175°C
Lead Temperatures	260°C

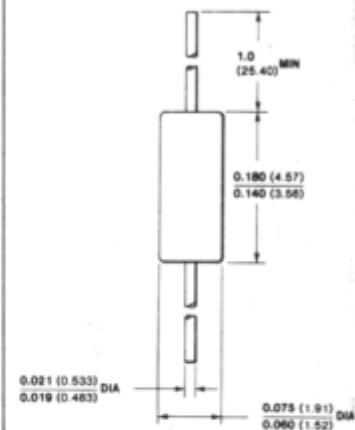
Power Dissipation (Notes 2)

Maximum Total Dissipation at 25°C Ambient	500 mW
Linear Derating Factor (from 25°C)	3.33 mW/°C

Maximum Voltage and Currents

	1N625	1N626	1N627	1N628	1N629
WIV Working Inverse Voltage	20 V	35 V	75 V	125 V	175 V
I_O Average Rectified Current	175 mA	175 mA	175 mA	175 mA	175 mA
I_F Forward Current Steady State	400 mA	400 mA	400 mA	400 mA	400 mA
$i_F(\text{surge})$ Peak Forward Surge Current					
Pulse Width = 1.0 s	1.0 A	1.0 A	1.0 A	1.0 A	1.0 A
Pulse Width = 1.0 μs	4.0 A	4.0 A	4.0 A	4.0 A	4.0 A

DO-35 OUTLINE



NOTES:

- Copper clad steel leads, tin plated
- Gold plated leads available
- Hermetically sealed glass package
- Package weight is 0.14 gram

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

SYMBOL	CHARACTERISTIC	MIN	MAX	UNITS	TEST CONDITIONS
V_F	Forward Voltage		1.5	V	$I_F = 4.0 \text{ mA}$
I_R	Reverse Current		1.0 30	μA μA	$V_R = \text{rated WIV}$ $V_R = \text{rated WIV, } T_A = 100^\circ\text{C}$
BV	Breakdown Voltage	1N625 1N626 1N627 1N628 1N629	30 50 100 150 200	V V V V V	$I_R = 100 \mu\text{A}$ $I_R = 100 \mu\text{A}$ $I_R = 100 \mu\text{A}$ $I_R = 100 \mu\text{A}$ $I_R = 100 \mu\text{A}$
t_{rr}	Reverse Recovery Time		1.0	μs	$I_F = 30 \text{ mA, } V_R = 35 \text{ V,}$ Recovery to 400 k Ω

NOTES:

- The maximum ratings are limiting values above which life or satisfactory performance may be impaired.
- These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.
- For product family characteristic curves, refer to Chapter 4, D1.

CURVE SET NUMBER D1
HIGH VOLTAGE SMALL SIGNAL DIODE

TYPICAL ELECTRICAL CHARACTERISTIC CURVES
AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE NOTED

