

Silicon Schottky – Diode

1N5390

5V/20mA

DATASHEET

OEM – Fairchild

Source: Fairchild Databook 1978

FH1100 • 1N5390**HOT CARRIER DIODE**

DIFFUSED SILICON

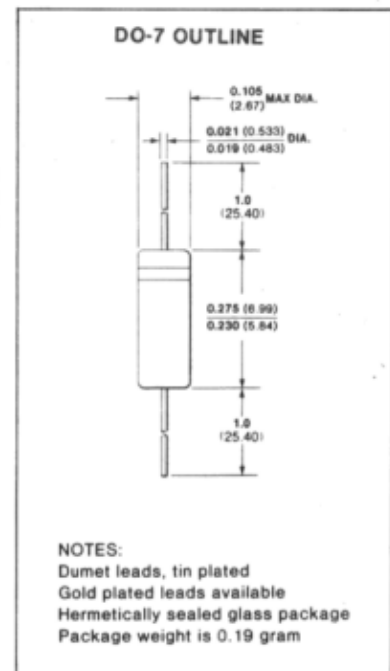
- Q_S ... 1.6 pC (TYP)
- C ... 1.0 pF (MAX)
- NF ... 10 dB (MAX) @ $f = 890$ MHz

ABSOLUTE MAXIMUM RATINGS (Note 2)**Temperatures**

Storage Temperature Range	-65°C to +150°C
Max Junction Operating Temperature	+125°C
Lead Temperature	+260°C

Power Dissipation (Note 3)

Maximum Total Dissipation at 25°C Ambient	100 mW
Linear Derating Factor (from 25°C)	1.0 mW / °C

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

SYMBOL	CHARACTERISTIC	MIN	TYP	MAX	UNITS	TEST CONDITIONS
V_F	Forward Voltage			0.55	V	$I_F = 10$ mA
I_R	Leakage Current			1.0 50	μ A nA	$V_R = 1.0$ V $V_R = 1.0$ V
BV	Breakdown Voltage	5.0			V	$I_R = 100$ μ A
C	Capacitance			1.0	pF	$V_R = 0$, $f = 1.0$ MHz
NF	Noise Figure			10	dB	$f = 890$ MHz
Q_S	Stored Charge (Note 1)		1.6	3.0	pC pC	$I_F = 10$ mA $I_F = 10$ mA

NOTES:

1. Measured on B-Line Electronics QS-3 stored charge meter.
2. The maximum ratings are limiting values above which life or satisfactory performance may be impaired.
3. These are steady state limits. The factory should be consulted on applications involving pulsed or low duty-cycle operation.
4. For product family characteristic curves, refer to Chapter 4, D10.

CURVE SET NUMBER D10
HOT CARRIER DIODE

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

