
1N4148

Silicon Epitaxial Planar Diode for Various Detector,
Modulator, Demodulator

HITACHI

ADE-208-147A (Z)

Rev. 1

Aug. 1995

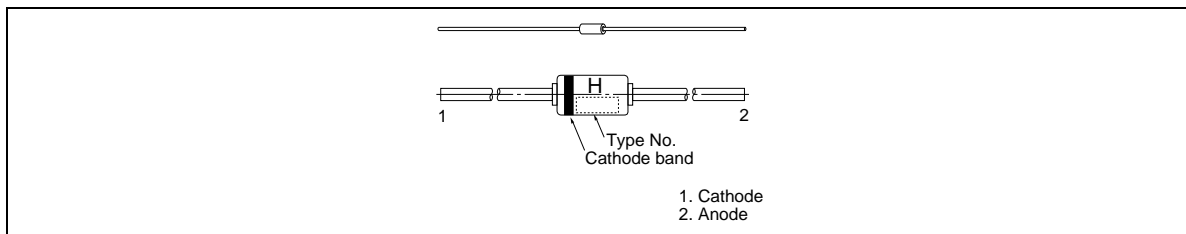
Features

- Low capacitance. ($C = 4.0\text{pF}$ max)
- Short reverse recovery time. ($t_r = 4.0\text{ns}$ max)
- High reliability with glass seal.

Ordering Information

Type No.	Cathode band	Mark	Package Code
1N4148	Black	H	DO-35

Outline



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Absolute Maximum Ratings (Ta = 25°C)

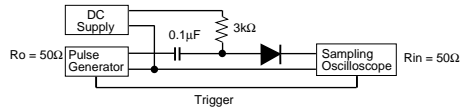
Item	Symbol	Value	Unit
Peak reverse voltage	V_{RM}	100	V
Reverse voltage	V_R	75	V
Peak forward current	I_{FM}	450	mA
Non-Repetitive peak forward surge current	I_{FSM}^*	1	A
Average forward current	I_O	150	mA
Power dissipation	Pd	500	mW
Storage temperature	Tstg	-65 to +200	°C

Note: Within 1s forward surge current.

Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	—	—	1.0	V	$I_F = 10\text{mA}$
Reverse current	I_R	—	—	25	nA	$V_R = 20\text{V}$
Capacitance	C	—	—	4.0	pF	$V_R = 0\text{V}, f = 1\text{MHz}$
Reverse recovery time	t_{rr}^*	—	—	4.0	ns	$I_F = 10\text{mA}, V_R = 6\text{V}, I_{rr} = 1\text{mA}, R_L = 100\Omega$

Note: Reverse recovery time test circuit



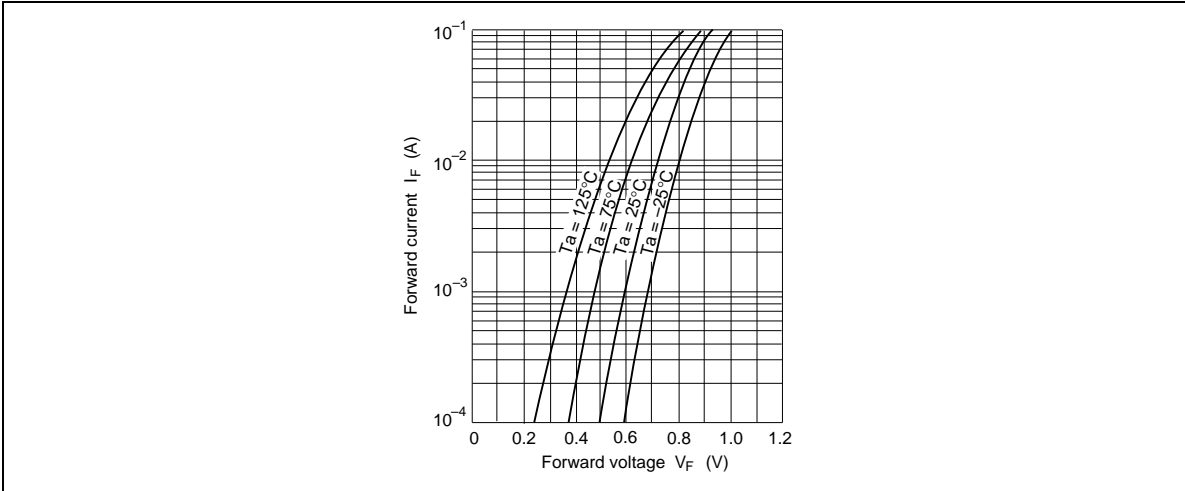


Fig. 1 Forward current Vs. Forward voltage

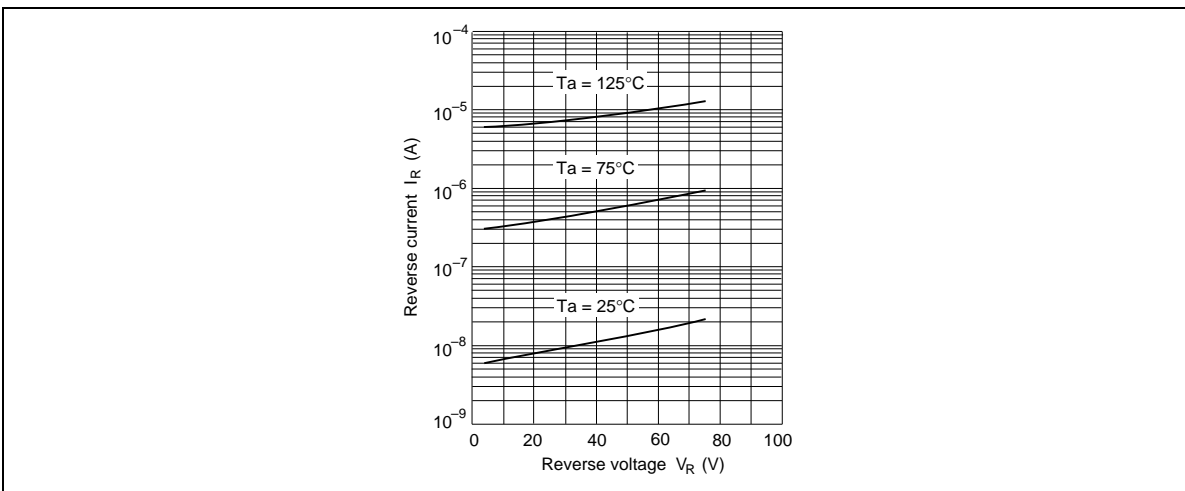


Fig. 2 Reverse current Vs. Reverse voltage

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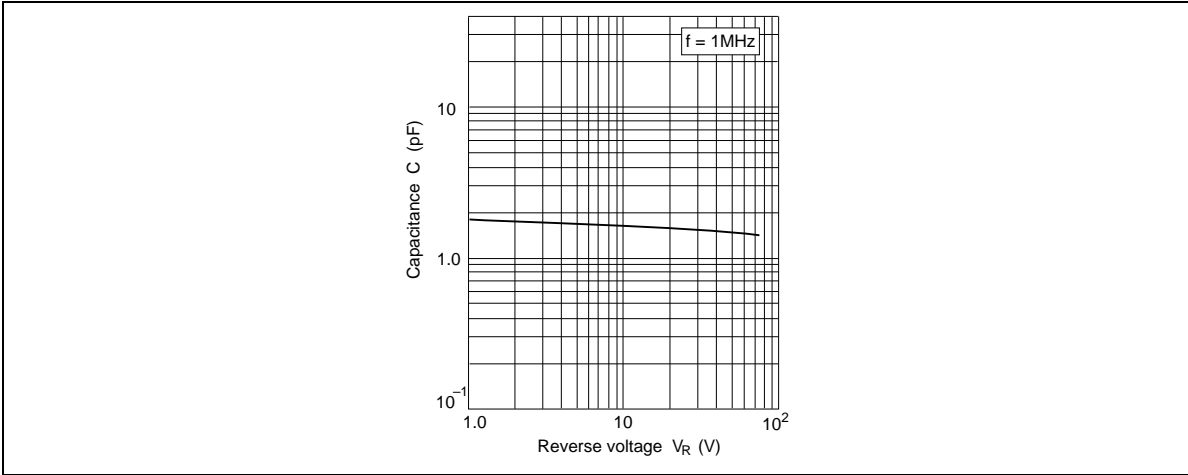


Fig. 3 Capacitance Vs. Reverse voltage

Package Dimensions

