ADE-208-142A(Z)

1S2074Ⓗ
Silicon Epitaxial Planar Diode for High Speed Switching

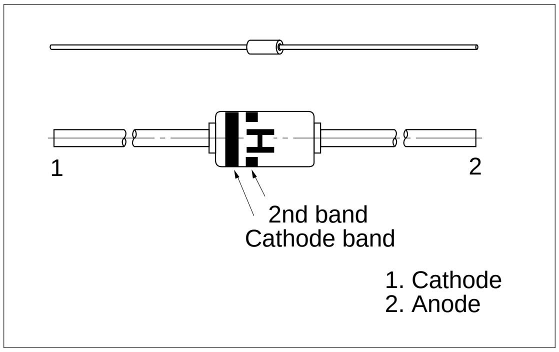
HITACHI

Rev. 1
Aug. 1995

Features

- Low capacitance. (C=3.0pF max)
- Short reverse recovery time. (t_{rr} =4.0ns max)
- High reliability with glass seal.

Outline



Ordering Information

Type No.	Cathode	2nd band	Mark	Package Code
1S2074Ⓗ	Green	White	H	DO-35

Absolute Maximum Ratings (Ta = 25°C)

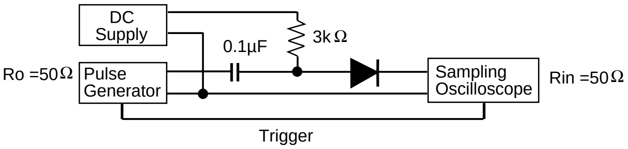
Item	Symbol	Value	Unit
Peak reverse voltage	V_{RM}	50	V
Reverse voltage	V_R	45	V
Peak forward current	I_{FM}	450	mA
Non-Repetitive peak forward surge current	I_{FSM} *	600	mA
Average forward current	I_o	150	mA
Power dissipation	P_d	250	mW
Junction temperature	T_j	175	°C
Storage temperature	T_{stg}	-65 to +175	°C

* Within 1s forward surge current.

Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	0.64	—	0.8	V	I_F = 10 mA
Reverse current	I_R	—	—	0.1	µA	V_R = 30 V
Capacitance	C	—	—	3.0	pF	V_R = 1 V, f = 1 MHz
Reverse recovery time	t_{rr} *	—	—	4.0	ns	I_F=I_R=10mA, I_{rr}=1mA

* Reverse recovery time test circuit



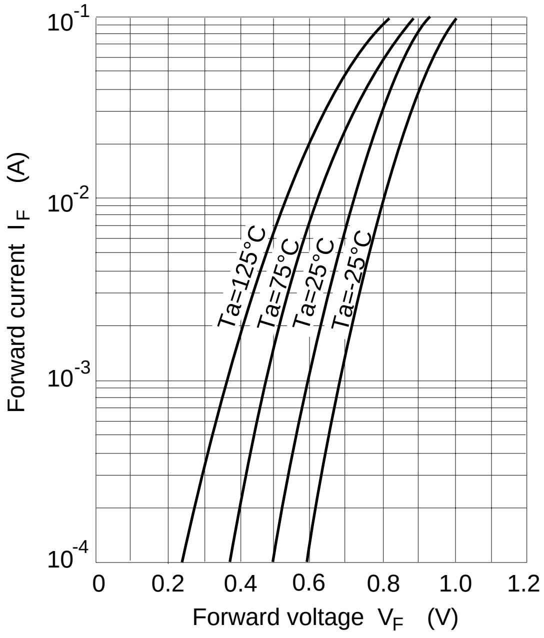


Fig.1 Forward current Vs. Forward voltage

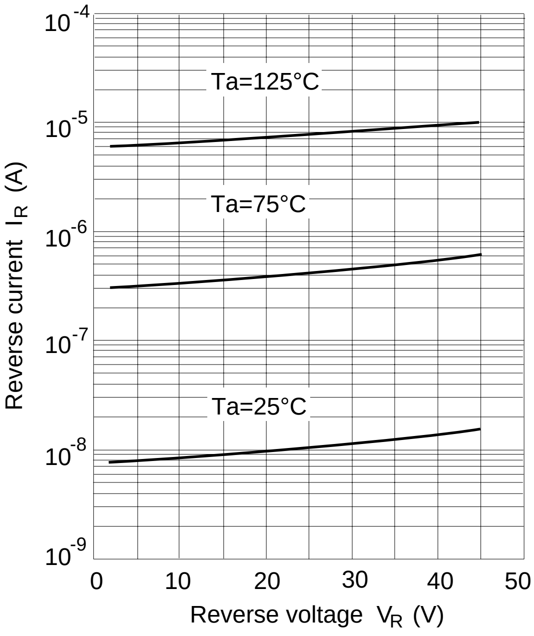


Fig.2 Reverse current Vs. Reverse voltage

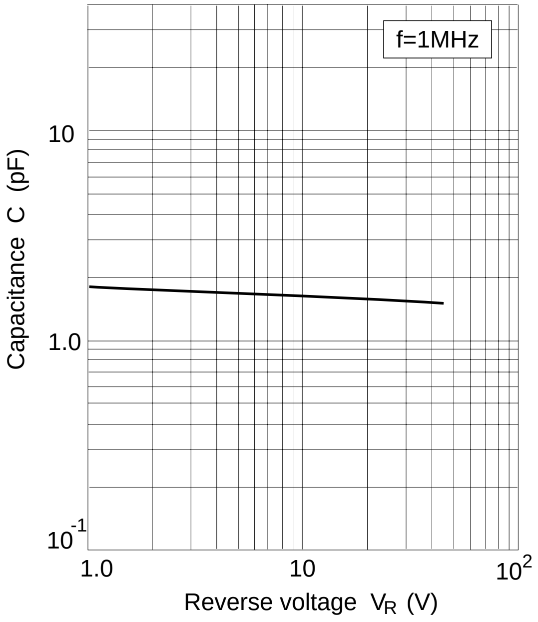
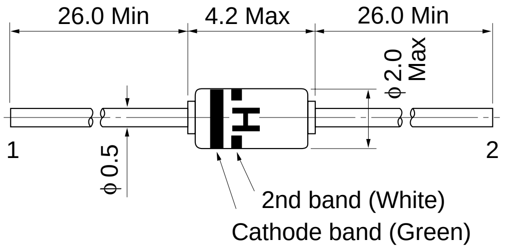


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm



1 Cathode
2 Anode

HITACHI Code	DO-35
JEDEC Code	DO-35
EIAJ Code	SC-48
Weight (g)	0.13