To all our customers

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Renesas Technology Corp.
Customer Support Dept.
April 1, 2003

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Keep safety first in your circuit designs!

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   Remember to give due consideration to safety when making your circuit designs, with appropriate measures such as (i) placement of substitutive, auxiliary circuits, (ii) use of nonflammable material or (iii) prevention against any malfunction or mishap.

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1S2074(H)

Silicon Epitaxial Planar Diode for High Speed Switching

RENESAS

ADE-208-142B (Z)

Rev.2
Oct. 2000

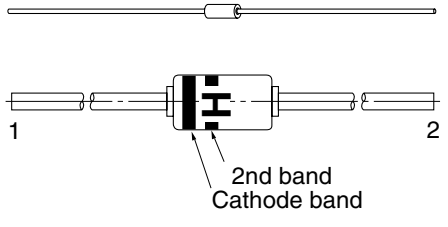
Features

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

Ordering Information

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

Pin Arrangement



1. Cathode
2. Anode

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	Pd	250	mW
Junction temperature	Tj	175	°C
Storage temperature	Tstg	–65 to +175	°C

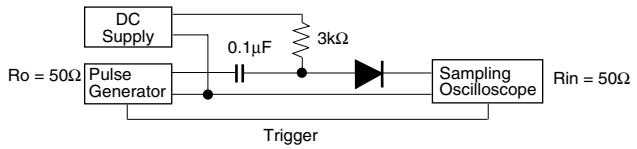
Note: Within 1s forward surge current.

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	$I_F = I_R$ = 10 mA, Irr = 1 mA

Note: Reverse recovery time test circuit



Main Characteristic

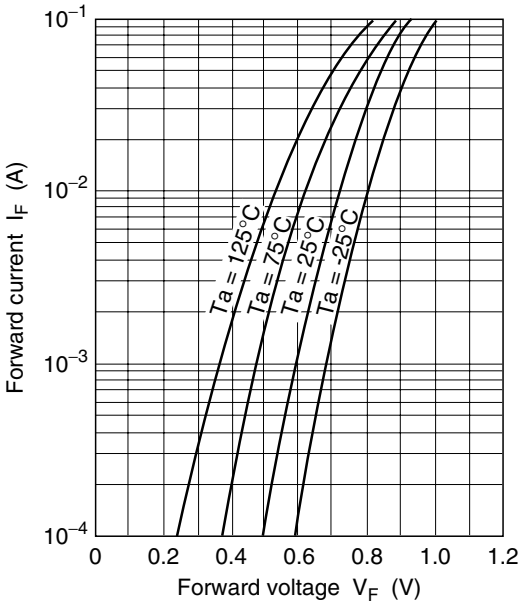


Fig.1 Forward current Vs. Forward voltage

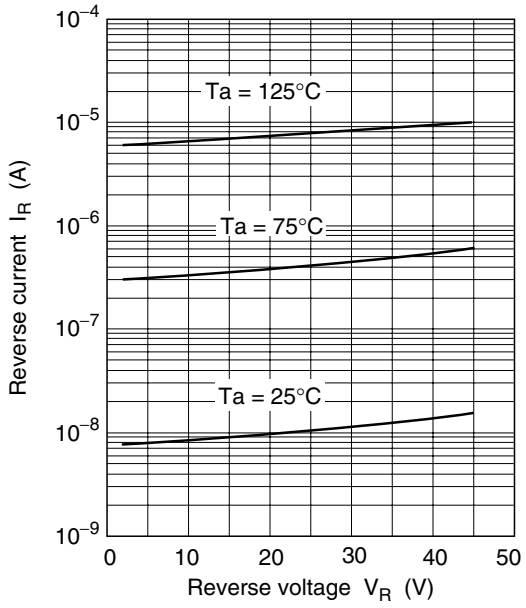


Fig.2 Reverse current Vs. Reverse voltage

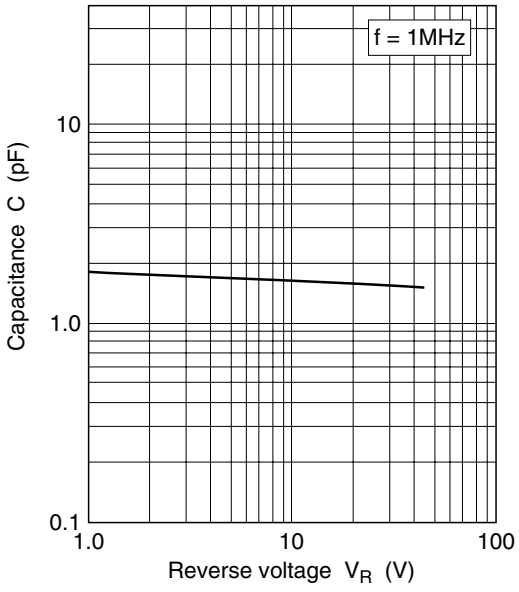
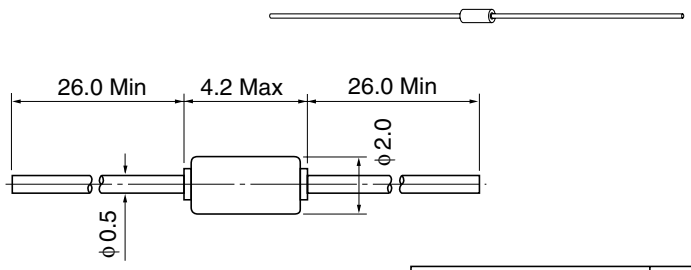


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm



Hitachi Code	DO-35
JEDEC	Conforms
EIAJ	Conforms
Mass (reference value)	0.13 g

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