

1S2075(K)

Silicon Epitaxial Planar Diode for High Speed Switching

HITACHI

ADE-208-144A (Z)

Rev. 1

Aug. 1995

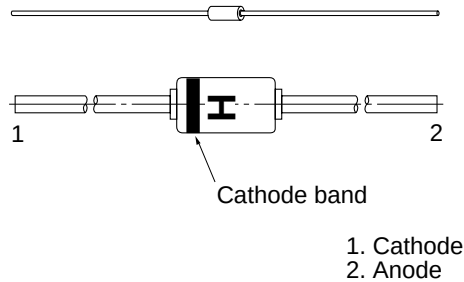
Features

- Low capacitance. ($C = 3.5\text{pF max}$)
- Short reverse recovery time. ($t_{rr} = 8.0\text{ns max}$)
- High reliability with glass seal.

Ordering Information

Type No.	Cathode band	Mark	Package Code
1S2075(K)	Green	H	DO-35

Outline



Absolute Maximum Ratings (Ta = 25°C)

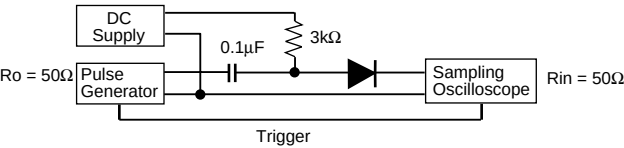
Item	Symbol	Value	Unit
Peak reverse voltage	V_{RM}	35	V
Reverse voltage	V_R	30	V
Peak forward current	I_{FM}	450	mA
Non-Repetitive peak forward surge current	I_{FSM}^*	600	mA
Average forward current	I_O	100	mA
Power dissipation	P_d	250	mW
Junction temperature	T_j	175	°C
Storage temperature	T_{stg}	-65 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	—	—	0.8	V	$I_F = 10\text{mA}$
Reverse current	I_R	—	—	0.1	μA	$V_R = 30\text{V}$
Capacitance	C	—	—	3.5	pF	$V_R = 1\text{V}$, $f = 1\text{MHz}$
Reverse recovery time	t_{rr}^*	—	—	8.0	ns	$I_F = I_R = 10\text{mA}$, $I_{rr} = 1\text{mA}$

Note: Reverse recovery time test circuit



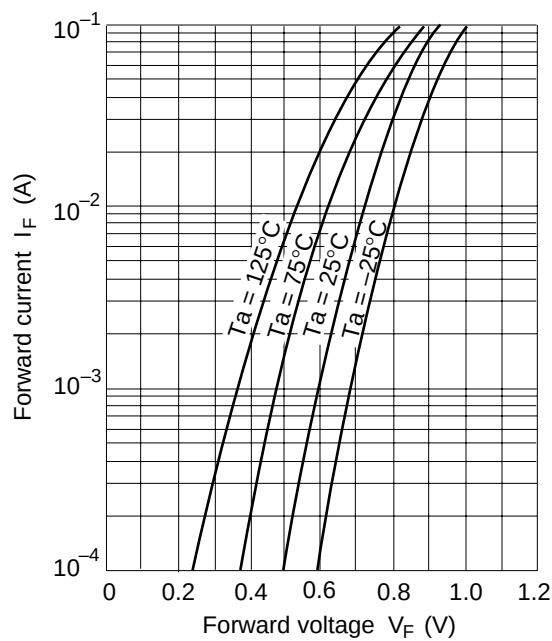


Fig.1 Forward current Vs. Forward voltage

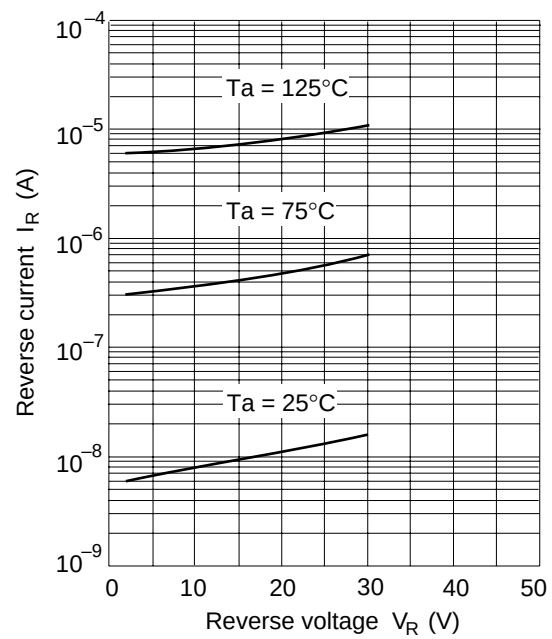


Fig.2 Reverse current Vs. Reverse voltage

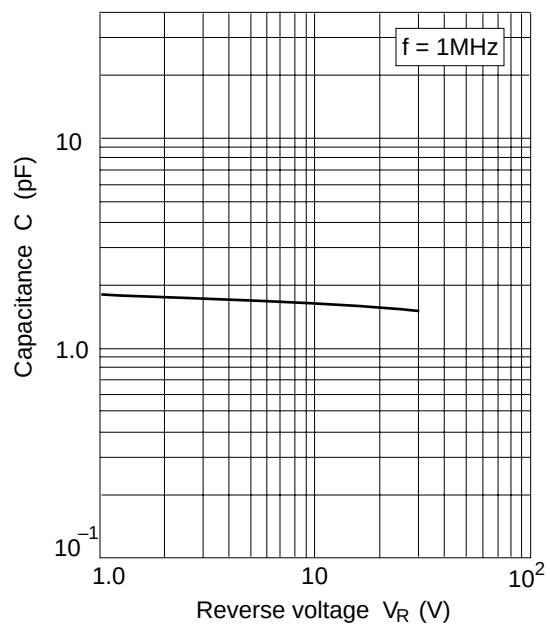
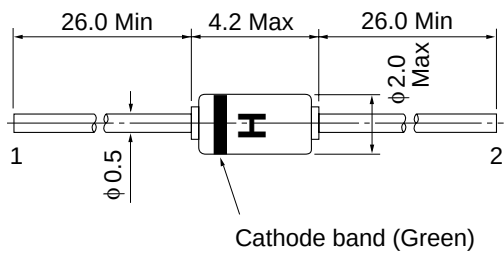


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm



- 1 Cathode
- 2 Anode

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

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Hitachi, Ltd.

Semiconductor & Integrated Circuits.
Nippon Bldg., 2-6-2, Ohte-machi, Chiyoda-ku, Tokyo 100-0004, Japan
Tel: Tokyo (03) 3270-2111 Fax: (03) 3270-5109

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For further information write to:

Hitachi Semiconductor (America) Inc. 179 East Tasman Drive, San Jose, CA 95134 Tel: <1> (408) 433-1990 Fax: <1> (408) 433-0223	Hitachi Europe GmbH Electronic components Group Dornacher Straße 3 D-85622 Feldkirchen, Munich Germany Tel: <49> (89) 9 9180-0 Fax: <49> (89) 9 29 30 00 Hitachi Europe Ltd. Electronic Components Group. Whitebrook Park Lower Cookham Road Maidenhead Berkshire SL6 8YA, United Kingdom Tel: <44> (1628) 585000 Fax: <44> (1628) 778322
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Hitachi Asia Pte. Ltd. 16 Collyer Quay #20-00 Hitachi Tower Singapore 049318 Tel: 535-2100 Fax: 535-1533 Hitachi Asia Ltd. Taipei Branch Office 3F, Hung Kuo Building, No.167, Tun-Hwa North Road, Taipei (105) Tel: <886> (2) 2718-3666 Fax: <886> (2) 2718-8180
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Hitachi Asia (Hong Kong) Ltd.
Group III (Electronic Components)
7/F., North Tower, World Finance Centre,
Harbour City, Canton Road, Tsim Sha Tsui,
Kowloon, Hong Kong
Tel: <852> (2) 735 9218
Fax: <852> (2) 730 0281
Telex: 40815 HITEC HX

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