Silicon Schottky Barrier Diode for Various Detector, High Speed Switching

# **HITACHI**

ADE-208-302A (Z)

Rev. 1 Sep. 1995

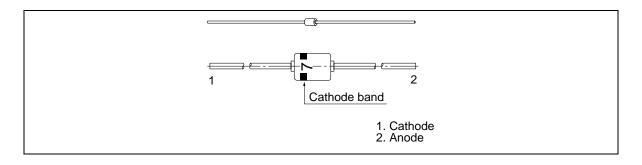
### **Features**

- Very low reverse current.
- Detection efficiency is very good.
- Small glass package (MHD) enables easy mounting and high reliability.

## **Ordering Information**

Type No.	Cathode band	Mark	Package Code
1SS286	Green	7	MHD

### **Outline**





## **Absolute Maximum Ratings**

 $(Ta = 25^{\circ}C)$ 

Item	Symbol	Value	Unit
Reverse voltage	$V_R$	25	V
Forward current	I <sub>F</sub>	35	mA
Power dissipation	Pd	150	mW
Junction temperature	Tj	100	°C
Storage temperature	Tstg	-55 to +100	°C

## **Electrical Characteristics**

 $(Ta = 25^{\circ}C)$ 

Item	Symbol	Min	Тур	Max	Unit	Test Condition
Forward voltage	$V_{F}$	_	_	0.6	V	$I_F = 10mA$
Reverse voltage	V <sub>R</sub>	25	_	_	V	$I_R = 10\mu A$
Reverse current	I <sub>R</sub>	_	_	10	nA	V <sub>R</sub> = 10V
Capacitance	С	_	_	1.2	pF	V <sub>R</sub> = 0V, f = 1MHz
Capacitance deviation	ΔC	_	_	0.1	pF	V <sub>R</sub> = 0V, f = 1MHz
Forward voltage deviation	$\Delta V_{_{\rm F}}$	_	_	10	mV	I <sub>F</sub> = 10mA
ESD-Capability	_	10	_	_	V	*¹C = 200pF, Both forward and reverse direction 1 pulse.

Notes: 1. Failure criterion; I<sub>R</sub> ≥ 20µA

2. Each group shall unify a multiple of 4 diodes

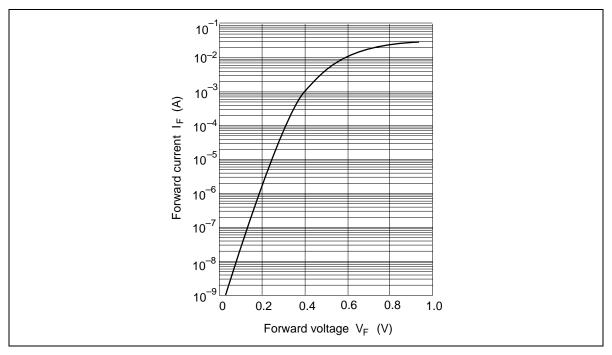


Fig.1 Forward current Vs. Forward voltage

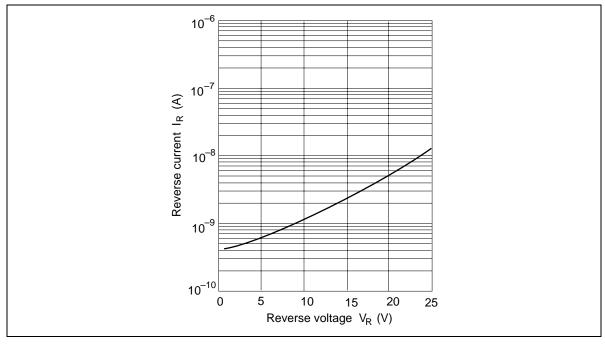


Fig.2 Reverse current Vs. Reverse voltage

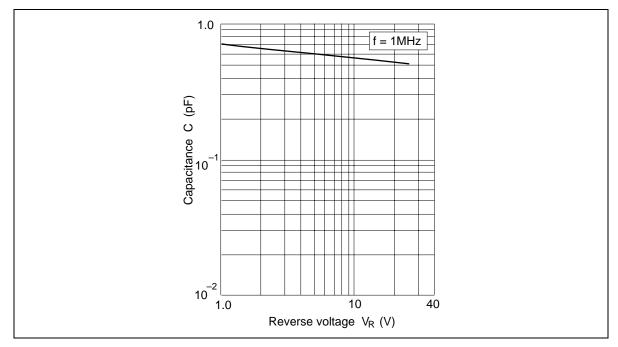
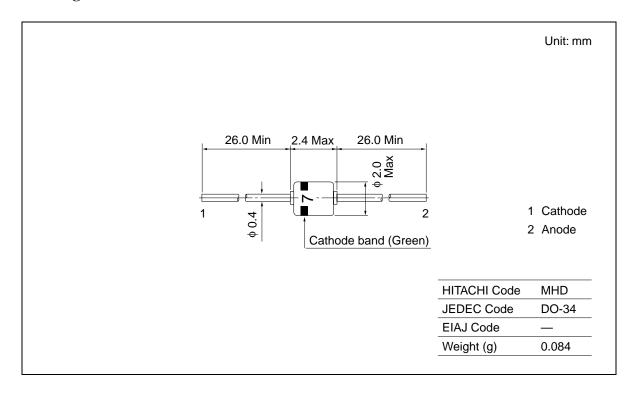


Fig.3 Capacitance Vs. Reverse voltage

## **Package Dimensions**



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### **Sales Offices**

# HITACHI

Hitachi, Ltd.

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

Hitachi Europe Ltd.

URL

NorthAmerica : http://semiconductor.hitachi.com/
Europe : http://www.hitachi-eu.com/hel/ecg
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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

Electronic Components Group Whitebrook Park Lower Cookham Road Maidenhead Berkshire SL6 8YA, United Kingdom Tel: <44> (1628) 585000 Fax: <44> (1628) 585200

Hitachi Europe GmbH Electronic Components Group Dornacher Straße 3 D-85622 Feldkirchen, Munich Germany Tel: <49> (89) 9 9180-0

Tel: <49> (89) 9 9180-0 Fax: <49> (89) 9 29 30 00 Hitachi Asia Ltd.
Hitachi Tower
16 Collyer Quay #20-00
Singapore 049318
Tel: <65>-538-6533/538-8577
Fax: <65>-538-6933/538-3877
URL: http://www.hitachi.com.sg

Hitachi Asia Ltd. (Taipei Branch Office) 4/F, No. 167, Tun Hwa North Road Hung-Kuo Building Taipei (105), Taiwan Tel: <886>-(2)-2718-3666

Tal: <886>-(2)-2718-3666 Fax: <886>-(2)-2718-3680 Telex: 23222 HAS-TP URL: http://www.hitachi.com.tw 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 URL: http://semiconductor.l

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