

勝特力材料 886-3-5753170
勝特力电子(上海) 86-21-54151736
勝特力电子(深圳) 86-755-83298787
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1SS198

Silicon Schottky Barrier Diode for Various Detector,
High Speed Switching

HITACHI

ADE-208-298A (Z)

Rev. 1
Oct. 1998

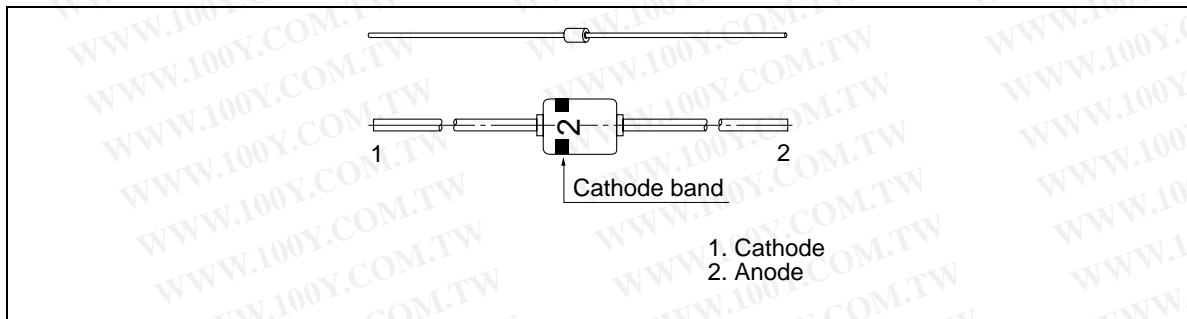
Features

- Detection efficiency is very good.
- Small temperature coefficient.
- Small glass package (MHD) enables easy mounting and high reliability.

Ordering Information

Type No.	Cathode	Mark	Package Code
1SS198	Green	2	MHD

Outline



1SS198

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V_R	10	V
Average rectified current	I_o	30	mA
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-55 to +125	°C

Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward current	I_F	4.5	—	—	mA	$V_F = 1V$
Reverse current	I_R	—	—	70	μA	$V_R = 6V$
Capacitance	C	—	—	1.5	pF	$V_R = 1V, f = 1MHz$
Rectifier efficiency	η	70	—	—	%	$V_{in} = 2V_{rms}, f = 40MHz, R_L = 5k\Omega, C_L = 20pF$
ESD-Capability ¹⁾	—	100	—	—	V	C = 200pF, Both forward and reverse direction 1 pulse.

Notes: 1. Failure Criterion ; $I_R \geq 140\mu A$ at $V_R = 6V$

Main Characteristic

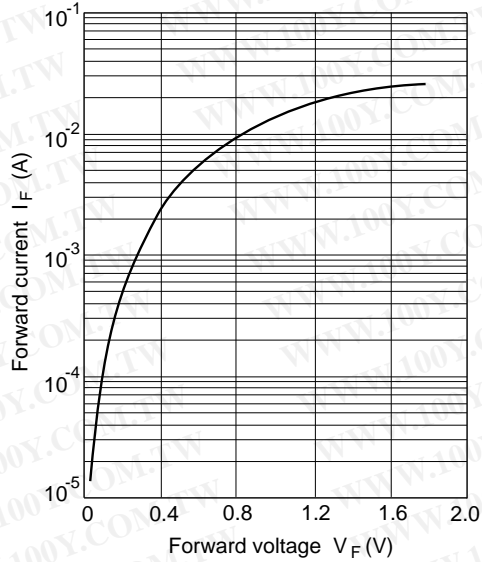


Fig.1 Forward current Vs. Forward voltage

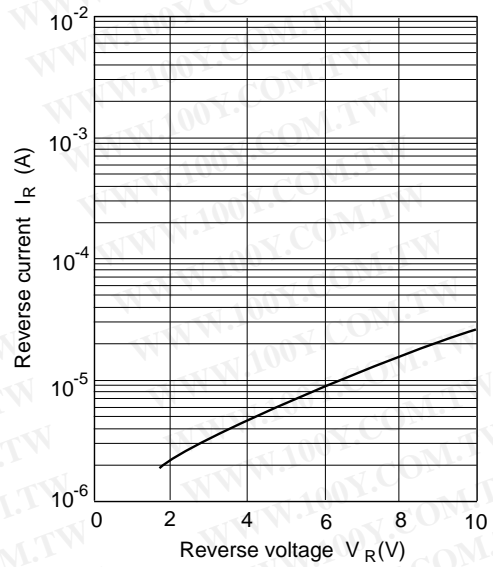


Fig.2 Reverse current Vs. Reverse voltage

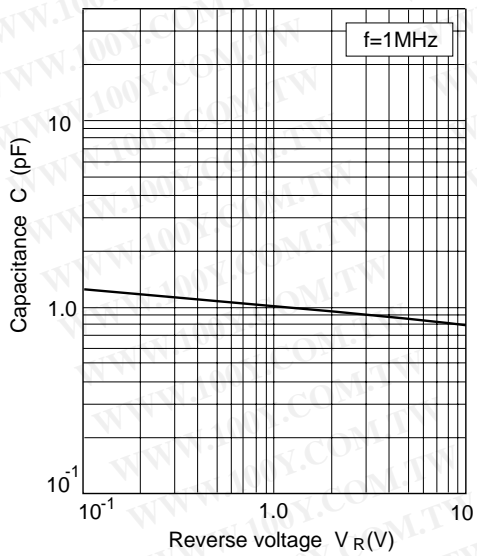


Fig.3 Capacitance Vs. Reverse voltage

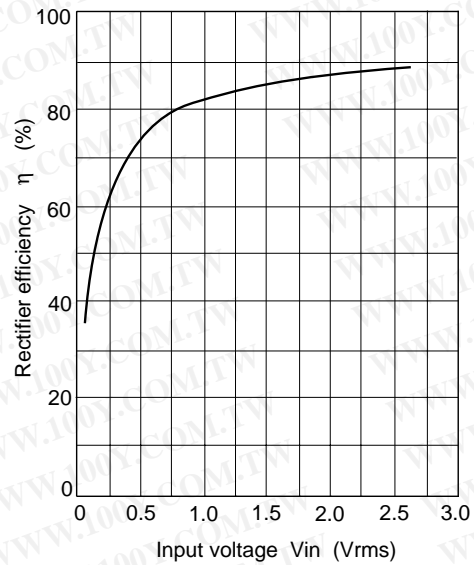
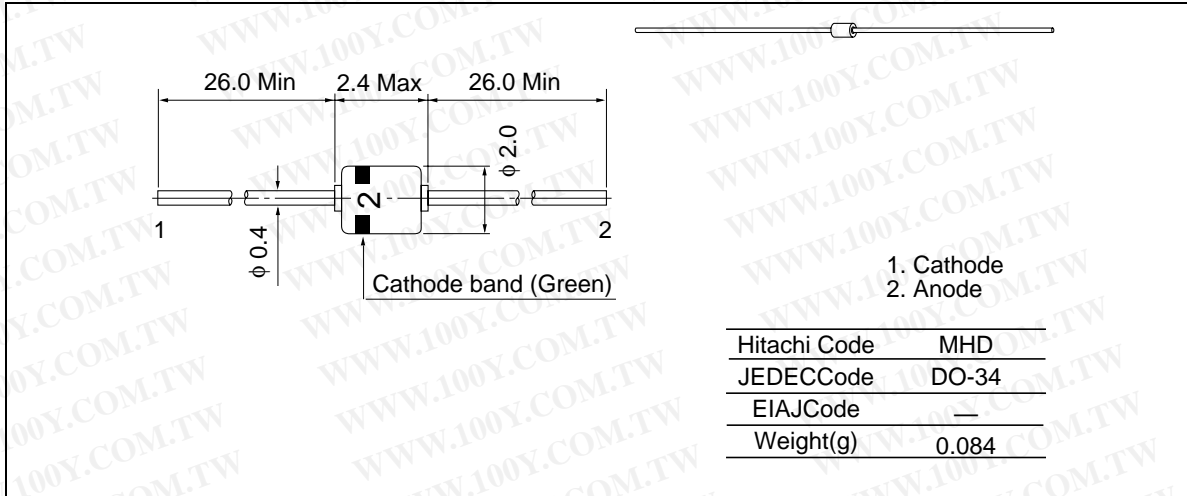


Fig.4 Rectifier efficiency Vs. Input voltage

1SS198

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

URL NorthAmerica : <http://semiconductor.hitachi.com/>
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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 Ltd.
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
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
Fax : <886>-(2)-2718-8180
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.hitachi.com.hk>

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