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# 1SS82

Silicon Epitaxial Planar Diode for High Voltage Switching

# HITACHI

ADE-208-149A (Z)

Rev. 1

Jul. 1995

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## Features

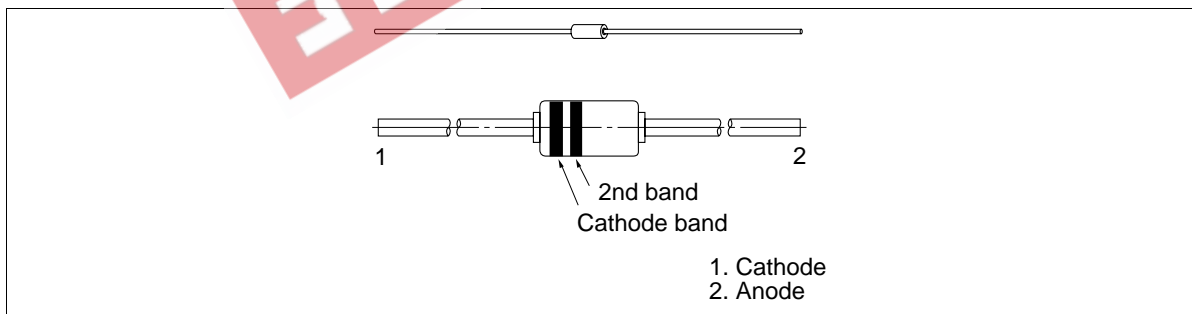
- High reverse voltage. ( $V_R = 200V$ )
- High reliability with glass seal.

## Ordering Information

Type No.	Cathode band	2nd band	Package Code
1SS82	Verdure	Light Blue	DO-35

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## Outline



## 1SS82

### Absolute Maximum Ratings\*<sup>2</sup> (Ta = 25°C)

Item	Symbol	Value	Unit
Peak reverse voltage	$V_{RM}^{*1}$	250	V
Reverse voltage	$V_R$	200	V
Peak forward current	$I_{FM}$	625	mA
Non-Repetitive peak forward surge current	$I_{FSM}^{*2}$	1	A
Average forward current	$I_O$	200	mA
Power dissipation	Pd	400	mW
Junction temperature	Tj	175	°C
Storage temperature	Tstg	-65 to +175	°C

Notes: 1. Reverse voltage in excess of peak reverse voltage may deteriorate electrical characteristic.  
2. Within 1s forward surge current.

### Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	$V_F$	—	—	1.0	V	$I_F = 100\text{mA}$
Reverse current	$I_{R1}$	—	—	0.2	$\mu\text{A}$	$V_R = 200\text{V}$
	$I_{R2}$	—	—	100		$V_R = 250\text{V}$
Capacitance	C	—	1.5	—	pF	$V_R = 0\text{V}$ , f = 1MHz
Reverse recovery time	$t_{rr}$	—	—	100	ns	$I_F = I_R = 30\text{mA}$ , $I_{rr} = 3\text{mA}$ , $R_L = 100\Omega$

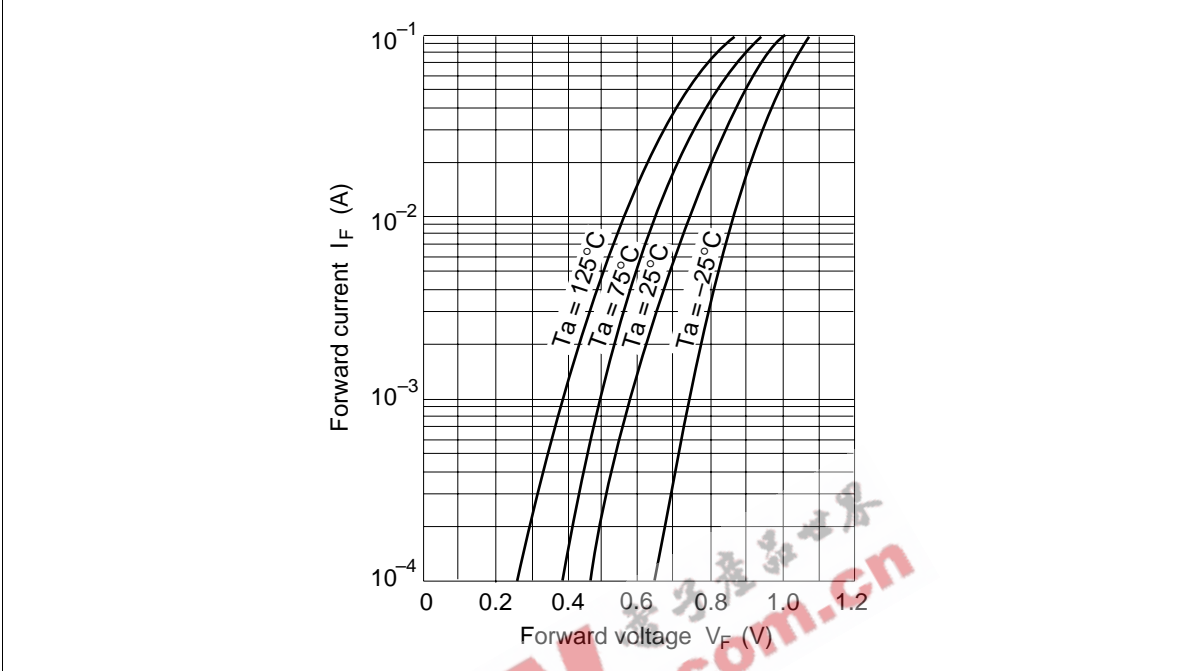


Fig.1 Forward current Vs. Forward voltage

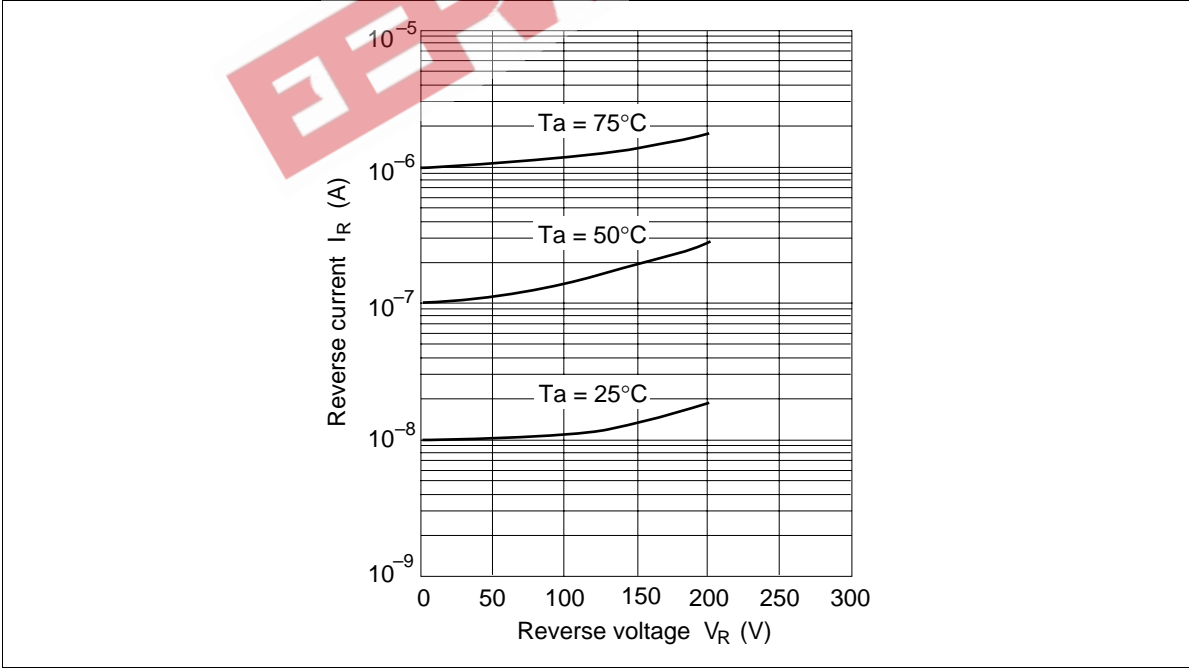


Fig.2 Reverse current Vs. Reverse voltage

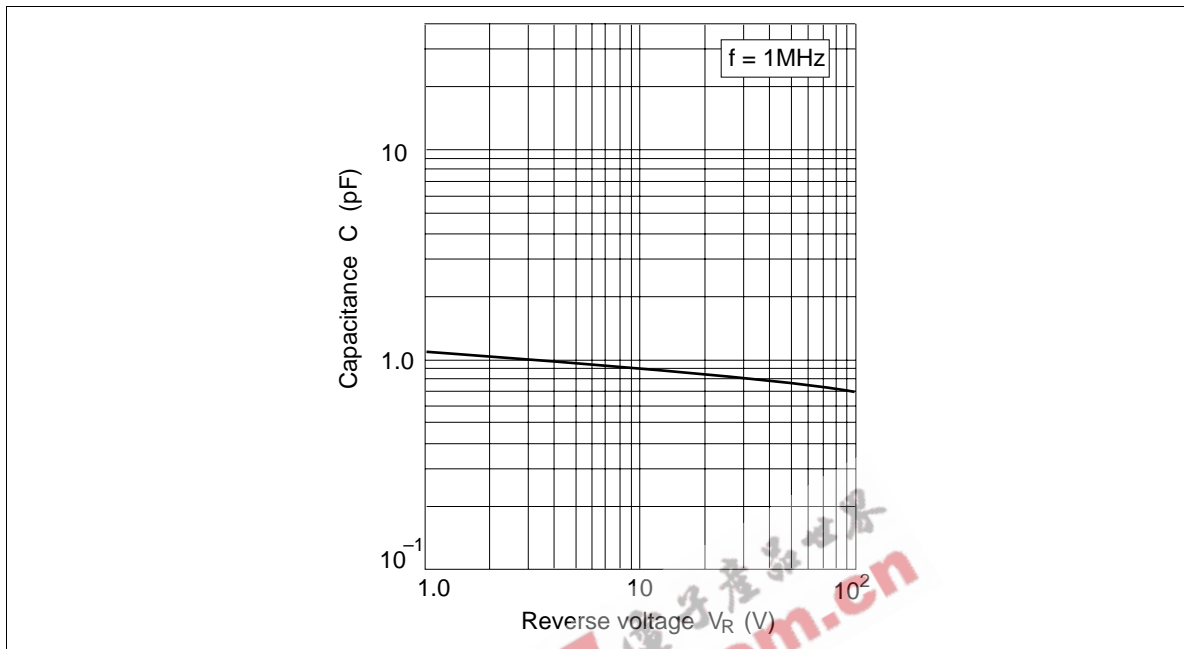
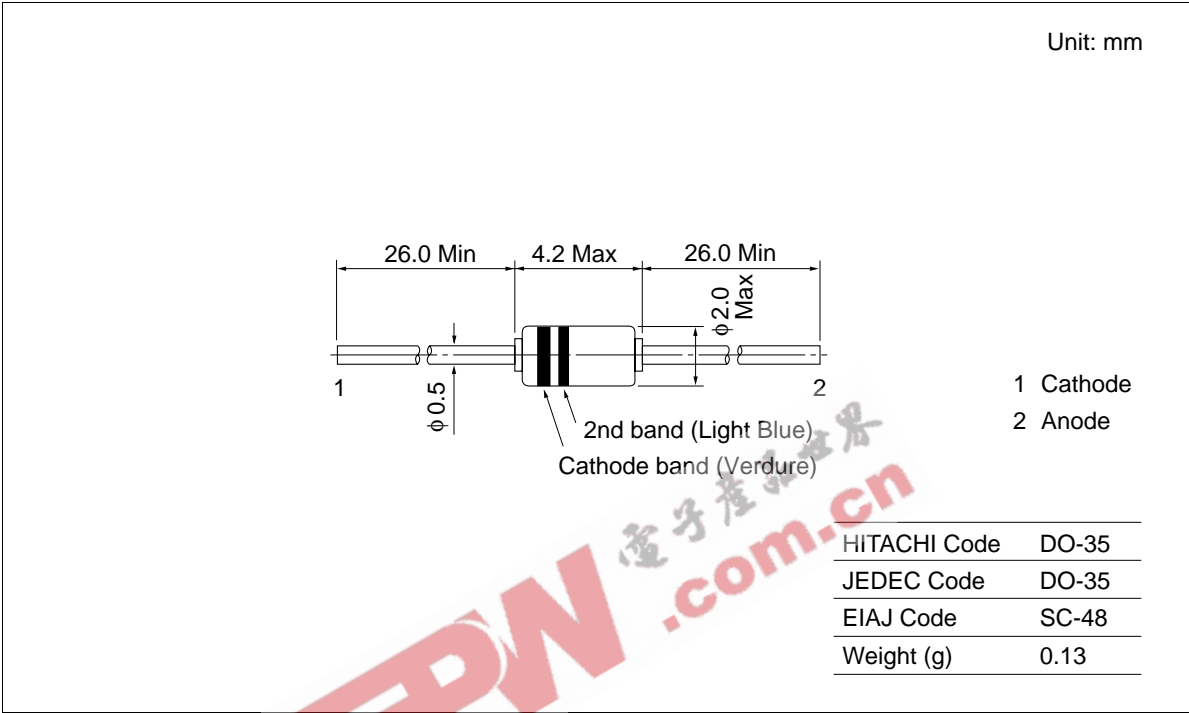


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions



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# HITACHI

## 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

URL      North America      : <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

Hitachi Europe GmbH  
Electronic components Group  
Dornacher StraÙe 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

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

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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