## **1SS82**

Silicon Epitaxial Planar Diode for High Voltage Switching

# **HITACHI**

ADE-208-149A (Z) Rev. 1 Jul. 1995

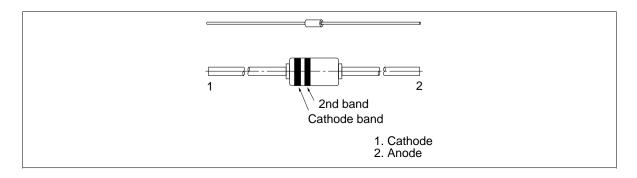
#### Features

- 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

#### Outline





### **1SS82**

### **Absolute Maximum Ratings**\* $^{2}$ (Ta = 25°C)

Item	Symbol	Value	Unit	
Peak reverse voltage	V <sub>RM</sub> *1	250	V	
Reverse voltage	V <sub>R</sub>	200	V	
Peak forward current	I <sub>FM</sub>	625	mA	
Non-Repetitive peak forward surge current	I <sub>FSM</sub> *2	1	Α	
Average forward current	Io	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** ( $Ta = 25^{\circ}C$ )

Item	Symbol	Min	Тур	Max	Unit	Test Condition
Forward voltage	V <sub>F</sub>	_	_	1.0	V	I <sub>F</sub> = 100mA
Reverse current	I <sub>R1</sub>		_	0.2	μΑ	V <sub>R</sub> = 200V
	I <sub>R2</sub>	_	_	100		V <sub>R</sub> = 250V
Capacitance	С	_	1.5	_	pF	V <sub>R</sub> = 0V, f = 1MHz
Reverse recovery time	t <sub>rr</sub>	_	_	100	ns	$I_F = I_R = 30 \text{mA}, \text{ Irr} = 3 \text{mA}, R_L = 100 \Omega$

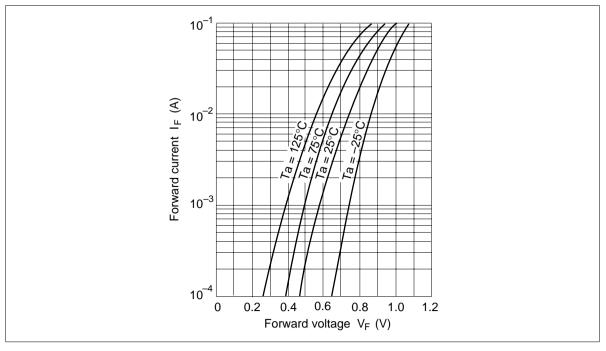


Fig.1 Forward current Vs. Forward voltage

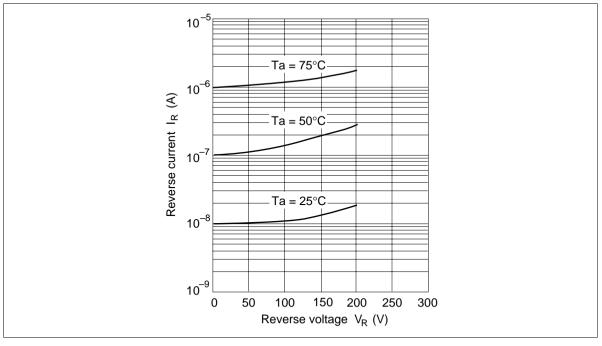


Fig.2 Reverse current Vs. Reverse voltage

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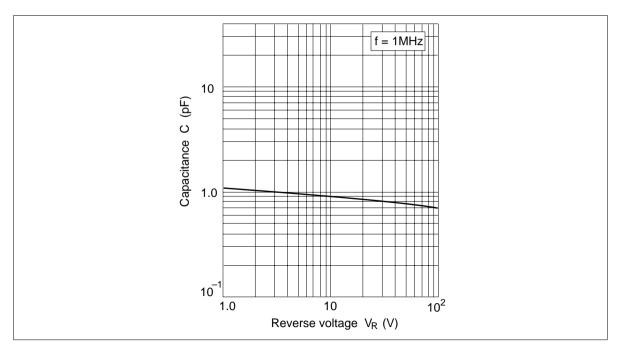
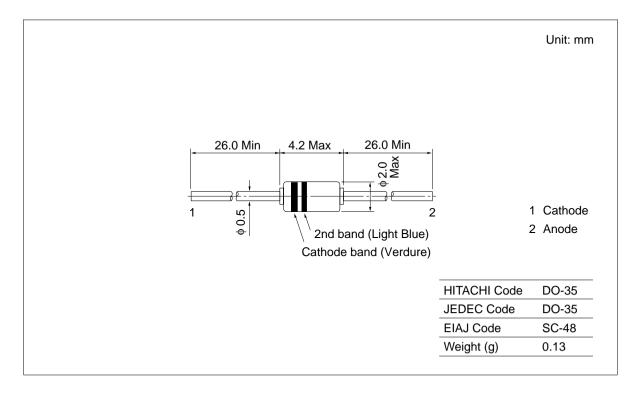


Fig.3 Capacitance Vs. Reverse voltage

### **Package Dimensions**



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