1SS83

Silicon Epitaxial Planar Diode for High Voltage Switching

HITACHI

ADE-208-150B (Z)

Rev.2
Oct. 2000

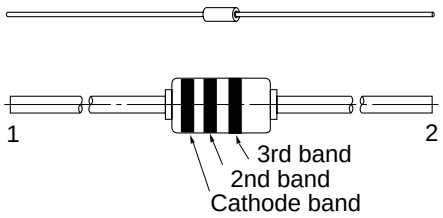
Features

- High reverse voltage. (V_R = 250 V)
- High reliability with glass seal.

Ordering Information

Type No.	Cathode band	2nd band	3rd band	Package Code
1SS83	Verdure	Light Blue	Light Blue	DO-35

Outline



1. Cathode
2. Anode

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Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Peak reverse voltage	V_{RM} *1	300	V
Reverse voltage	V_R	250	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 mA
Reverse current	I_{R1}	—	—	0.2	µA	V_R = 250 V
	I_{R2}	—	—	100		V_R = 300 V
Capacitance	C	—	1.5	—	pF	V_R = 0 V, f = 1 MHz
Reverse recovery time	t_{rr}	—	—	100	ns	I_F = I_R = 30 mA, Irr = 3 mA, R_L = 100 Ω

Main Characteristic

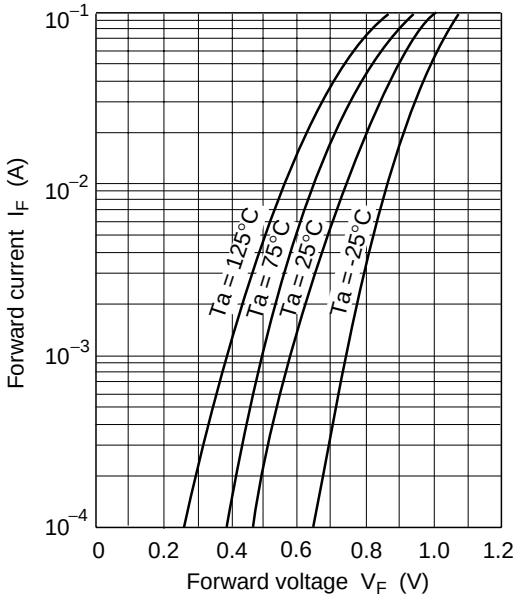


Fig.1 Forward current Vs. Forward voltage

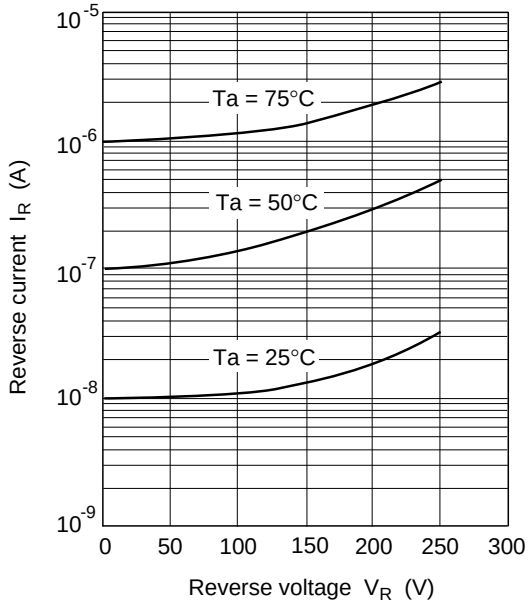


Fig.2 Reverse current Vs. Reverse voltage

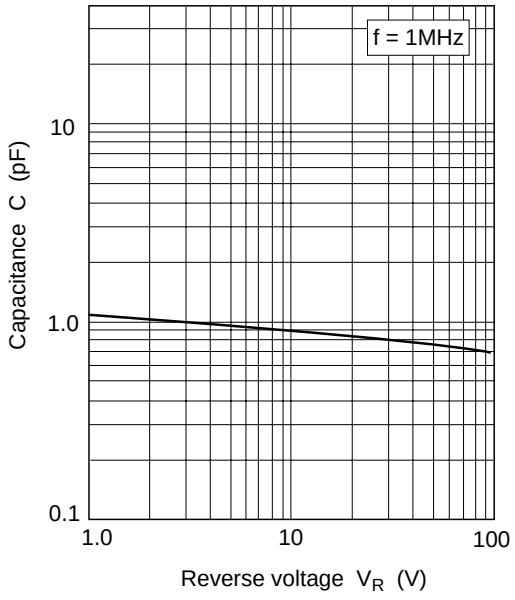
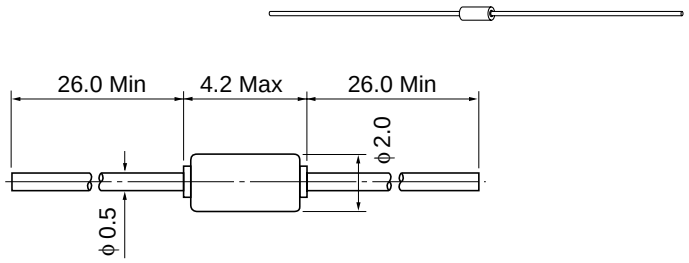


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm



Hitachi Code	DO-35
JEDEC	Conforms
EIAJ	Conforms
Mass (reference value)	0.13 g

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