
1SS81

Silicon Epitaxial Planar Diode for High Voltage Switching

HITACHI

ADE-208-148A (Z)

Rev. 1

Jul. 1995

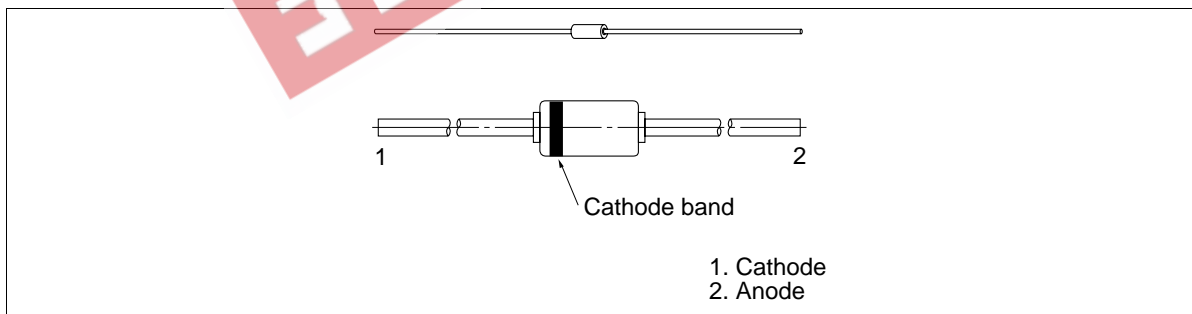
Features

- High reverse voltage. ($V_R = 150V$)
- High reliability with glass seal.

Ordering Information

Type No.	Cathode band	Package Code
1SS81	Verdure	DO-35

Outline



1SS81

Absolute Maximum Ratings*² (Ta = 25°C)

Item	Symbol	Value	Unit
Peak reverse voltage	V_{RM}^{*1}	200	V
Reverse voltage	V_R	150	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	μA	$V_R = 150\text{V}$
	I_{R2}	—	—	100		$V_R = 200\text{V}$
Capacitance	C	—	1.5	—	pF	$V_R = 0\text{V}$, $f = 1\text{MHz}$
Reverse recovery time	t_{rr}	—	—	100	ns	$I_F = I_R = 30\text{mA}$, $I_{rr} = 3\text{mA}$, $R_L = 100\Omega$

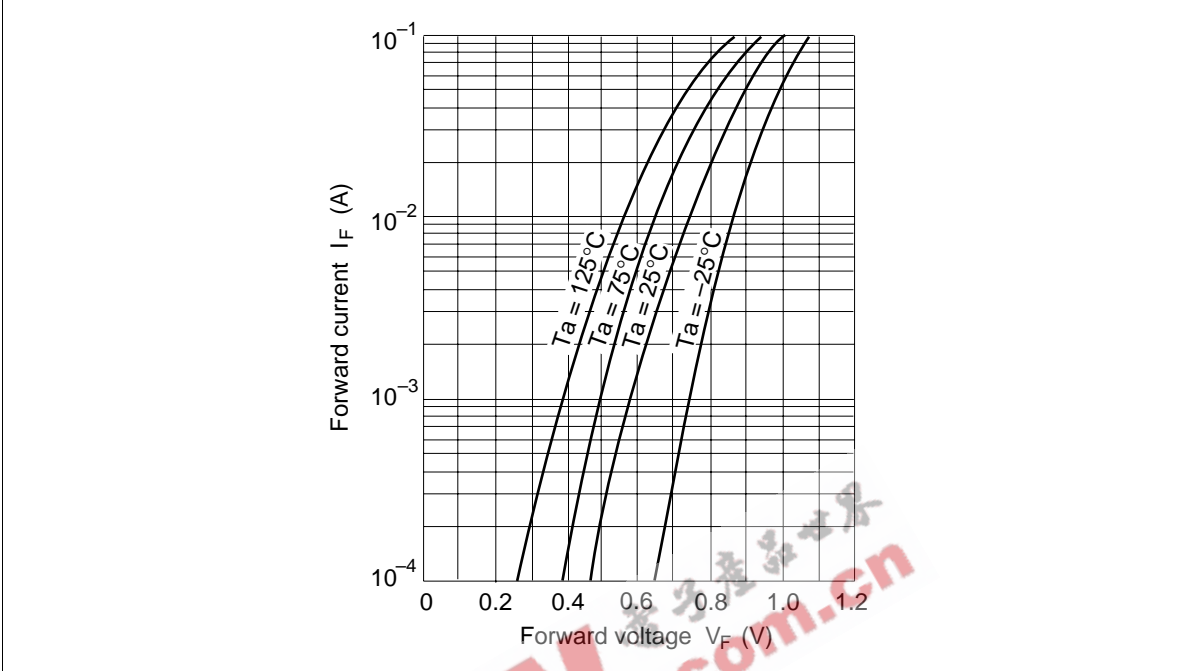


Fig.1 Forward current Vs. Forward voltage

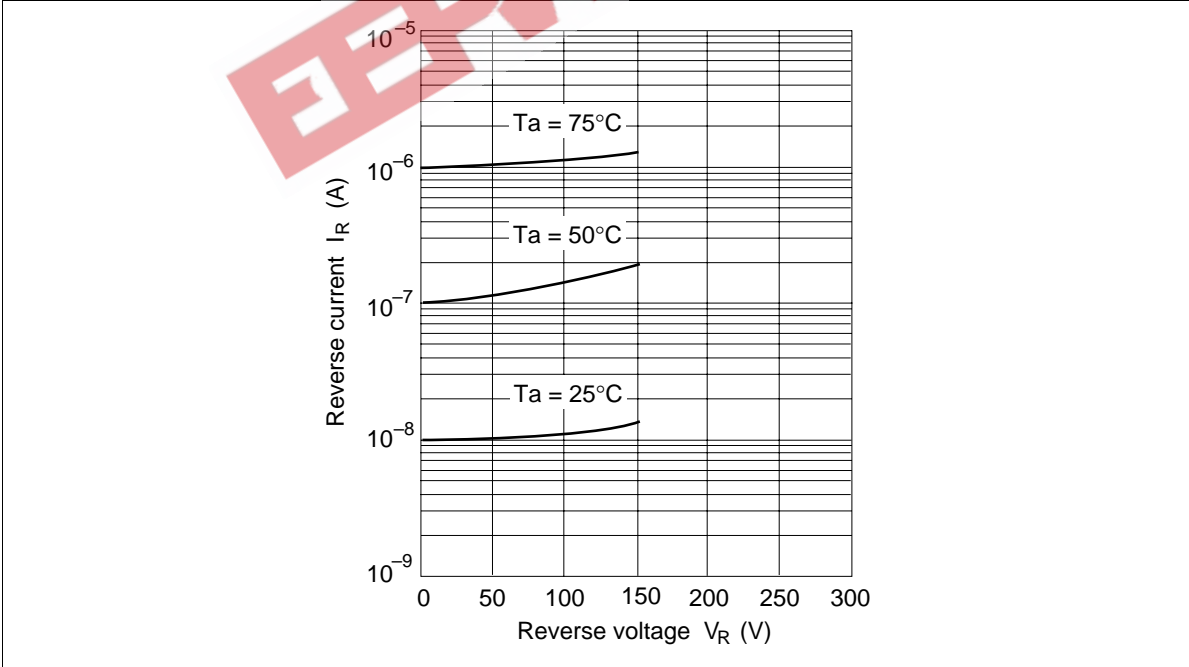


Fig.2 Reverse current Vs. Reverse voltage

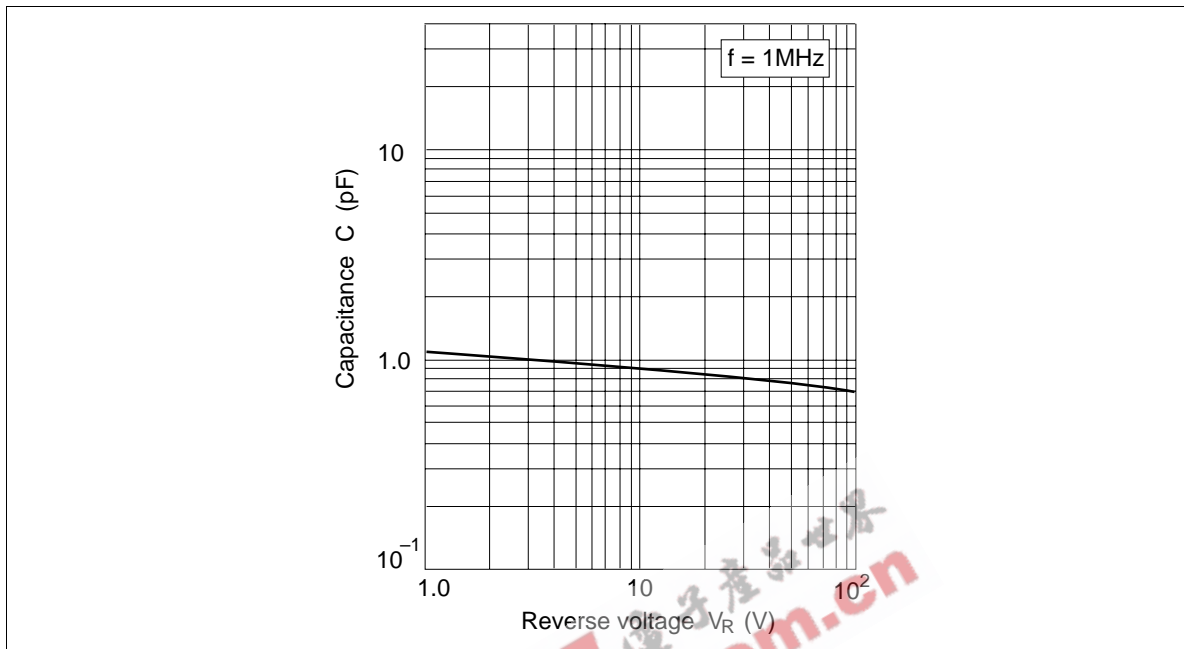
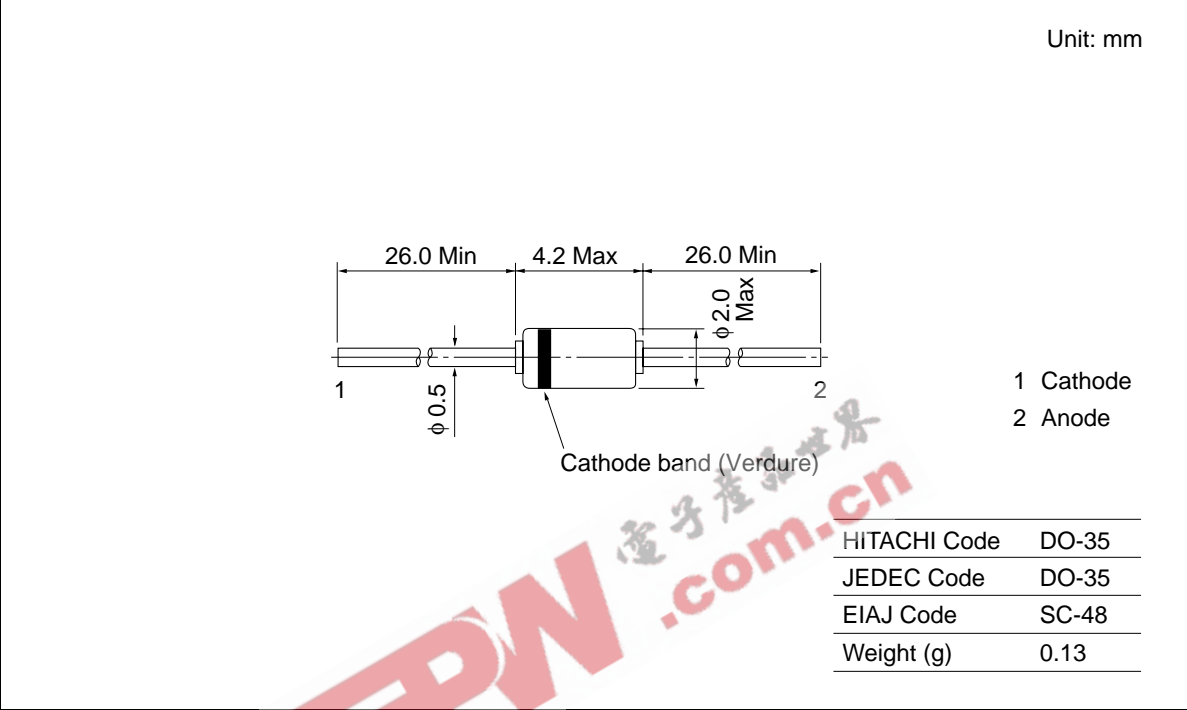


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions



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