

# 1SS84 Silicon Epitaxial Planar Diode for High Speed Switching

## HITACHI

Rev. 1  
Aug. 1995

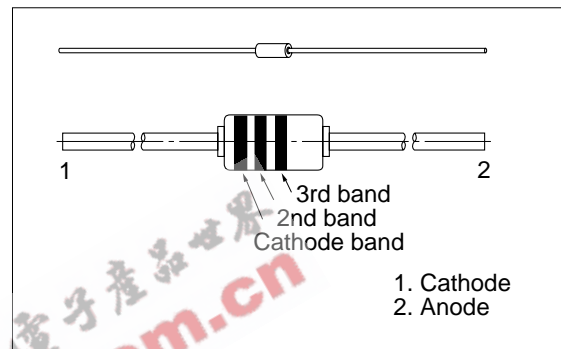
### Features

- Low reverse current.
- High reliability with glass seal.

### Ordering Information

Type No.	Cathode	2nd band	3rd band	Package Code
1SS84	Light Blue	Dark Green	Dark Green	DO-35

### Outline



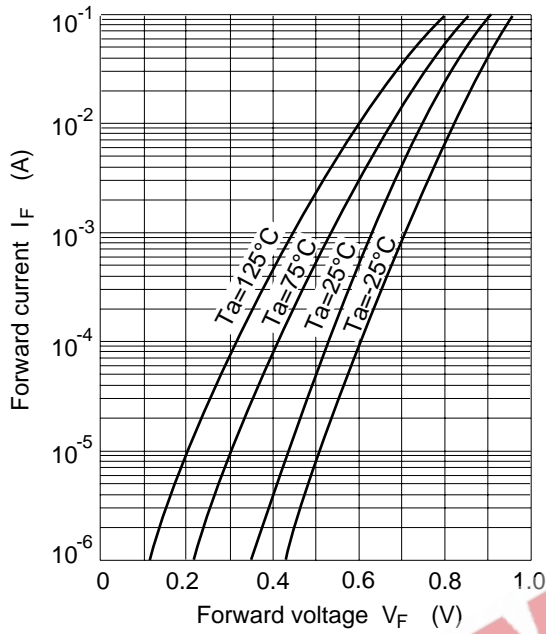
### Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Peak reverse voltage	$V_{RM}$	75	V
Reverse voltage	$V_R$	70	V
Peak forward current	$I_{FM}$	450	mA
Non-Repetitive peak forward surge current	$I_{FSM}^*$	1	A
Average forward current	$I_o$	150	mA
Power dissipation	$P_d$	250	mW
Junction temperature	$T_j$	175	°C
Storage temperature	$T_{stg}$	-65 to +175	°C

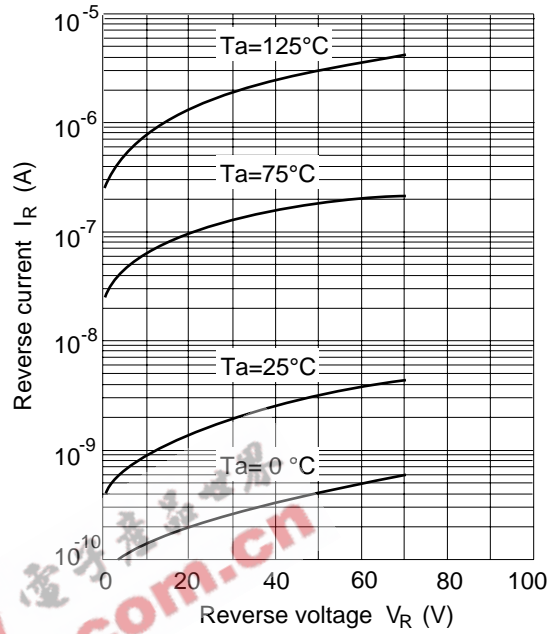
\* Within 1s forward surge current.

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

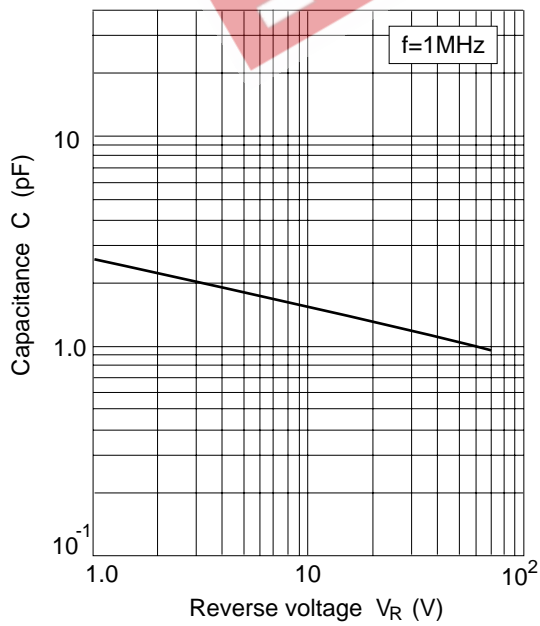
Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	$V_F$	—	—	0.8	V	$I_F = 10 \text{ mA}$
	$I_{R1}$	—	0.3	3		$V_R = 0.3 \text{ V}$
Reverse current	$I_{R2}$	—	—	10	nA	$V_R = 20 \text{ V}$
	$I_{R3}$	—	—	100		$V_R = 55 \text{ V}$
Capacitance	C	—	—	5	pF	$V_R = 1 \text{ V}, f = 1 \text{ MHz}$
Reverse recovery time	$t_{rr}$	—	—	50	ns	$I_F = I_R = 10 \text{ mA}, I_{rr} = 1 \text{ mA}, R_L = 100 \Omega$



**Fig.1 Forward current Vs. Forward voltage**



**Fig.2 Reverse current Vs. Reverse voltage**



**Fig.3 Capacitance Vs. Reverse voltage**

Package Dimensions

Unit: mm

