

# 1SS286

## Silicon Schottky Barrier Diode for Various Detector, High Speed Switching

# HITACHI

 Rev. 0  
 Dec. 1994

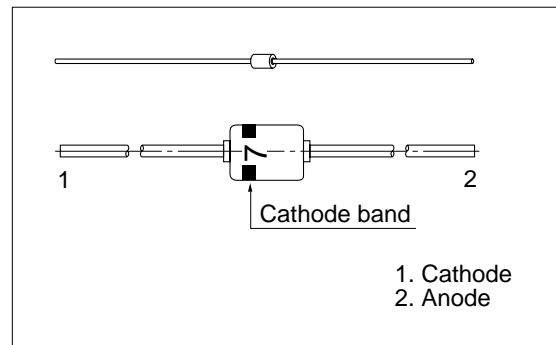
### Features

- Very low reverse current.
- Detection efficiency is very good.
- Small glass package (MHD) enables easy mounting and high reliability.

### Ordering Information

Type No.	Cathode band	Mark	Package Code
1SS286	Green	7	MHD

### Outline



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

Item	Symbol	Value	Unit
Reverse voltage	$V_R$	25	V
Forward current	$I_F$	35	mA
Power dissipation	$P_d$	150	mW
Lead temperature	$T_l^*$	260	°C
Junction temperature	$T_j$	100	°C
Storage temperature	$T_{stg}$	-55 to +100	°C

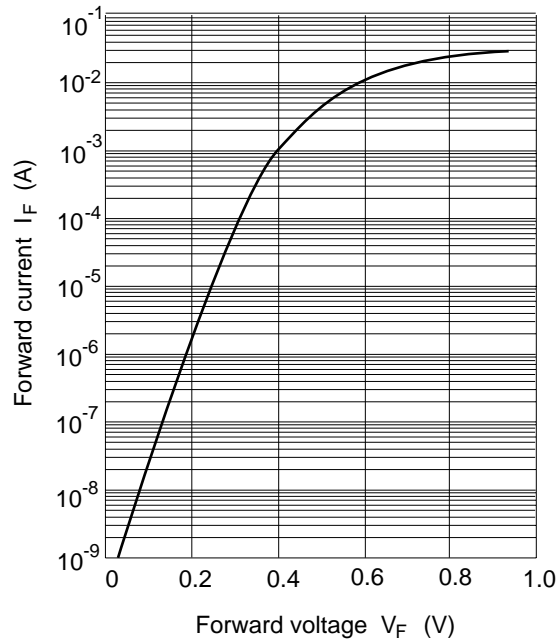
\* Value at distance 0.8mm from body for 10s max

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

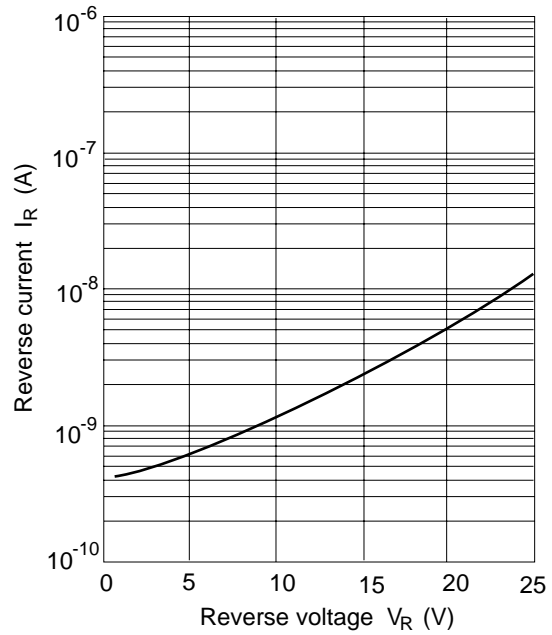
Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	$V_F$	—	—	0.6	V	$I_F = 10 \text{ mA}$
Reverse voltage	$V_R$	25	—	—	V	$I_R = 10 \text{ } \mu\text{A}$
Reverse current	$I_R$	—	—	10	nA	$V_R = 10 \text{ V}$
Capacitance	C	—	—	1.2	pF	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$
Capacitance deviation	$\Delta C$	—	—	0.1	pF	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$
Forward voltage deviation	$\Delta V_F$	—	—	10	mV	$I_F = 10 \text{ mA}$
ESD-Capability	—	10	—	—	V	*C=200pF, Both forward and reverse direction 1 pulse.

\* Failure criterion ;  $I_R \geq 20 \mu\text{A}$

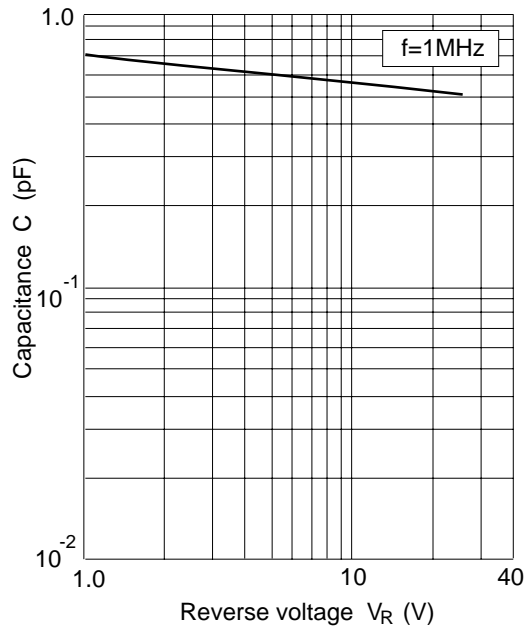
\*\* Each group shall unify a multiple of 4 diodes



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



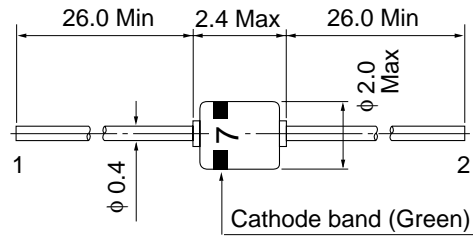
**Fig.2 Reverse current Vs. Reverse voltage**



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

### Package Dimensions

Unit: mm



1 Cathode  
2 Anode

HITACHI Code	MHD
JEDEC Code	DO-34
EIAJ Code	—
Weight (g)	0.084