

1SS286

Silicon Schottky Barrier Diode for Various Detector, High Speed Switching

HITACHI

Rev. 0
Dec. 1994

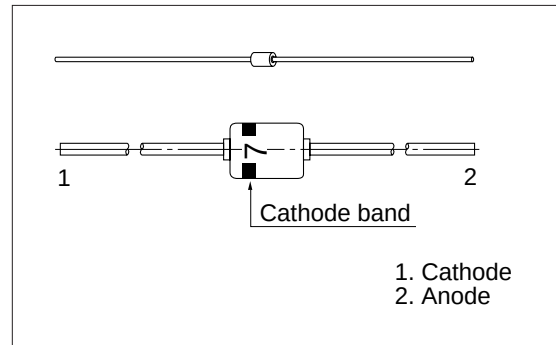
Features

- 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 ($T_a = 25^\circ\text{C}$)

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	$^\circ\text{C}$
Junction temperature	T_j	100	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +100	$^\circ\text{C}$

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

Electrical Characteristics ($T_a = 25^\circ\text{C}$)

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	ΔC	—	—	0.1	pF	$V_R = 0\text{ V}$, $f = 1\text{ MHz}$
Forward voltage deviation	ΔV_F	—	—	10	mV	$I_F = 10\text{ mA}$
ESD-Capability	—	10	—	—	V	*C=200pF, Both forward and reverse direction 1 pulse.

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

** Each group shall unify a multiple of 4 diodes

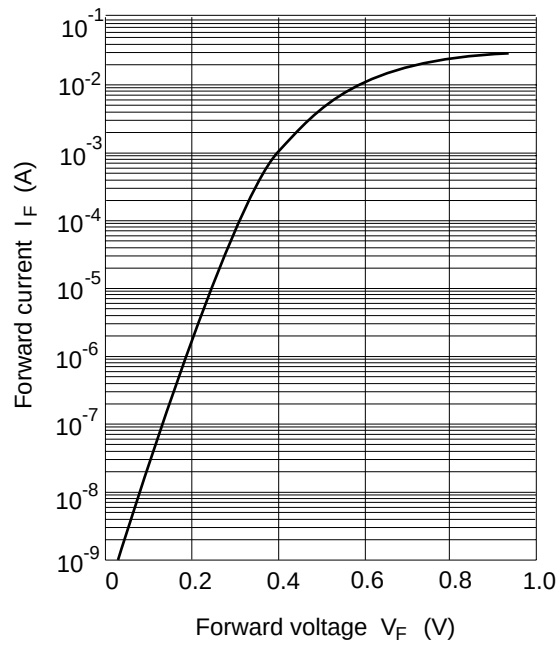


Fig.1 Forward current Vs. Forward voltage

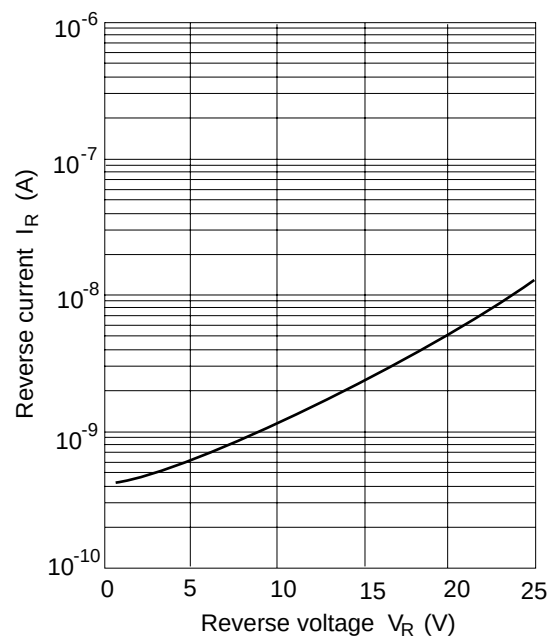


Fig.2 Reverse current Vs. Reverse voltage

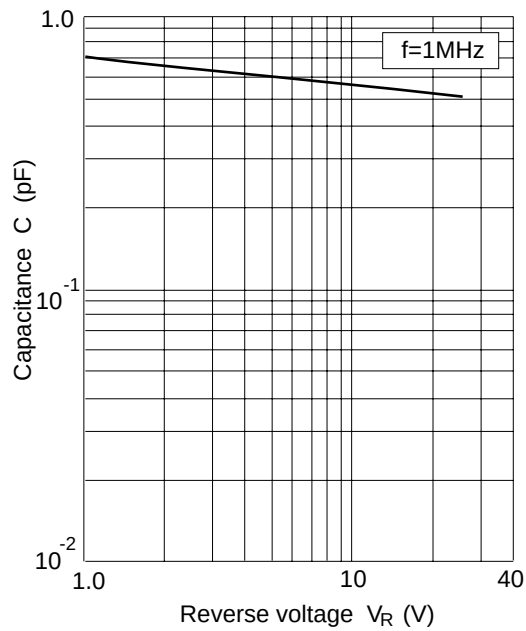
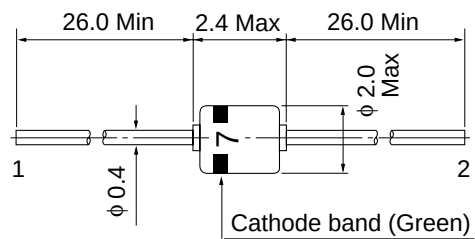


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm



- 1 Cathode
- 2 Anode

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