

1SS270

Silicon Epitaxial Planar Diode for High Speed Switching

HITACHI

ADE-208-165A (Z)

Rev. 1

Aug. 1995

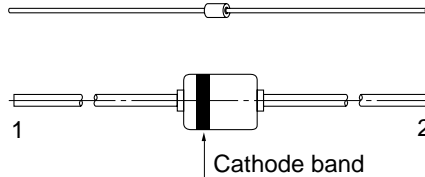
Features

- Low capacitance. ($C = 3.0\text{pF max}$)
- Short reverse recovery time. ($t_{rr} = 3.5\text{ns max}$)
- Small glass package (MHD) enables easy mounting and high reliability.

Ordering Information

Type No.	Cathode band	Package Code
1SS270	Light Blue	MHD

Outline



1. Cathode
2. Anode

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Item	Symbol	Value	Unit
Peak reverse voltage	V_{RM}	35	V
Reverse voltage	V_R	30	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	Pd	250	mW
Junction temperature	T_j	175	$^\circ\text{C}$
Storage temperature	T_{stg}	-65 to +175	$^\circ\text{C}$

Note: Within 1s forward surge current.

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

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	—	—	0.8	V	$I_F = 10\text{mA}$
Reverse current	I_R	—	—	1.0	μA	$V_R = 30\text{V}$
Capacitance	C	—	—	3.0	pF	$V_R = 1\text{V}$, $f = 1\text{MHz}$
Reverse recovery time	t_{rr}	—	—	3.5	ns	$I_F = 10\text{mA}$, $V_R = 6\text{V}$, $R_L = 50\Omega$

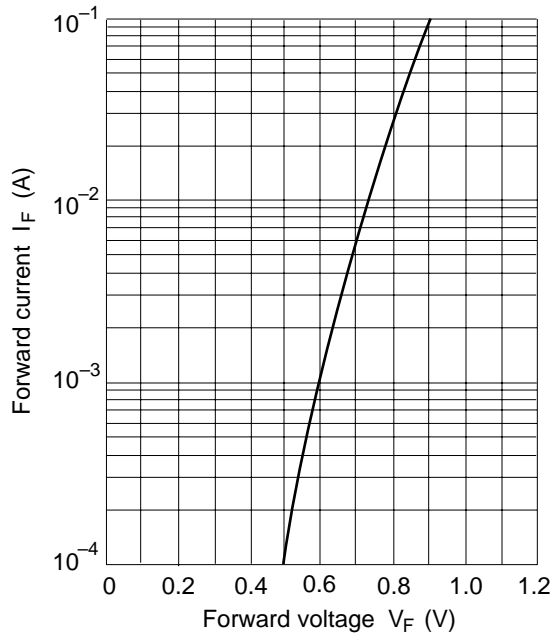


Fig.1 Forward current Vs. Forward voltage

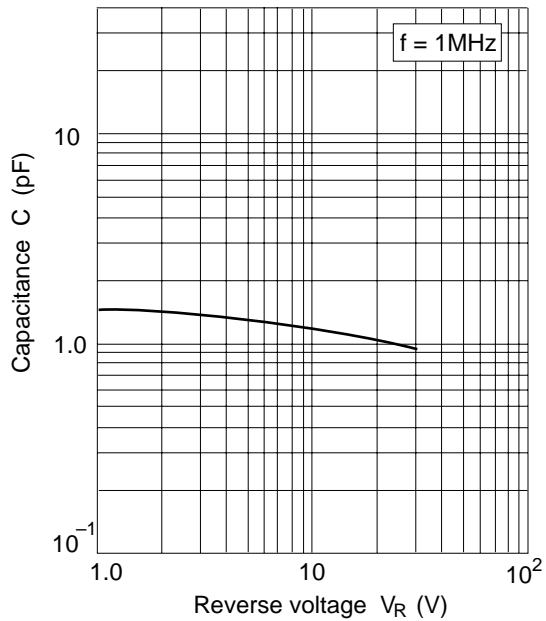
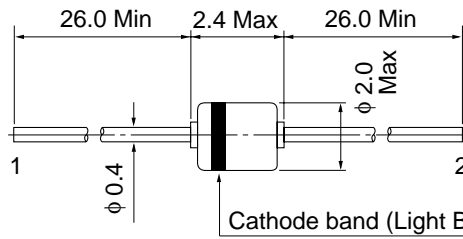


Fig.2 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm



1 Cathode
2 Anode

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

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