
1SS270

Silicon Epitaxial Planar Diode for High Speed Switching

HITACHI

ADE-208-165A (Z)

Rev. 1

Aug. 1995

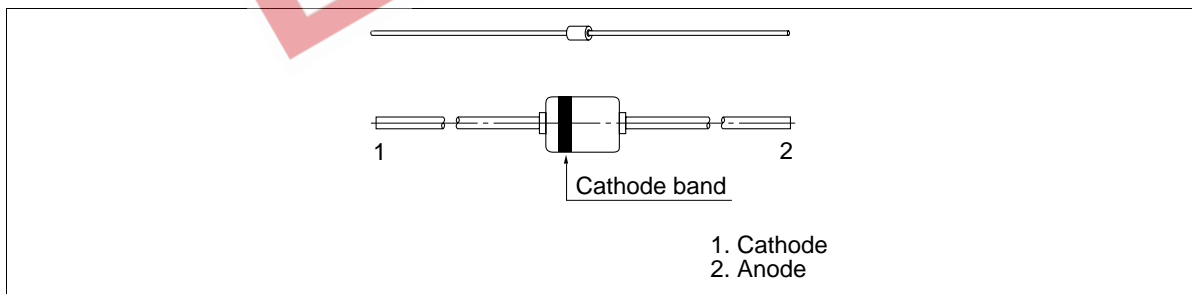
Features

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

Ordering Information

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

Outline



1SS270

Absolute Maximum Ratings (Ta = 25°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	Tj	175	°C
Storage temperature	Tstg	-65 to +175	°C

Note: 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	$I_F = 10\text{mA}$
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	$I_F = 10\text{mA}, V_R = 6\text{V}, R_L = 50\Omega$

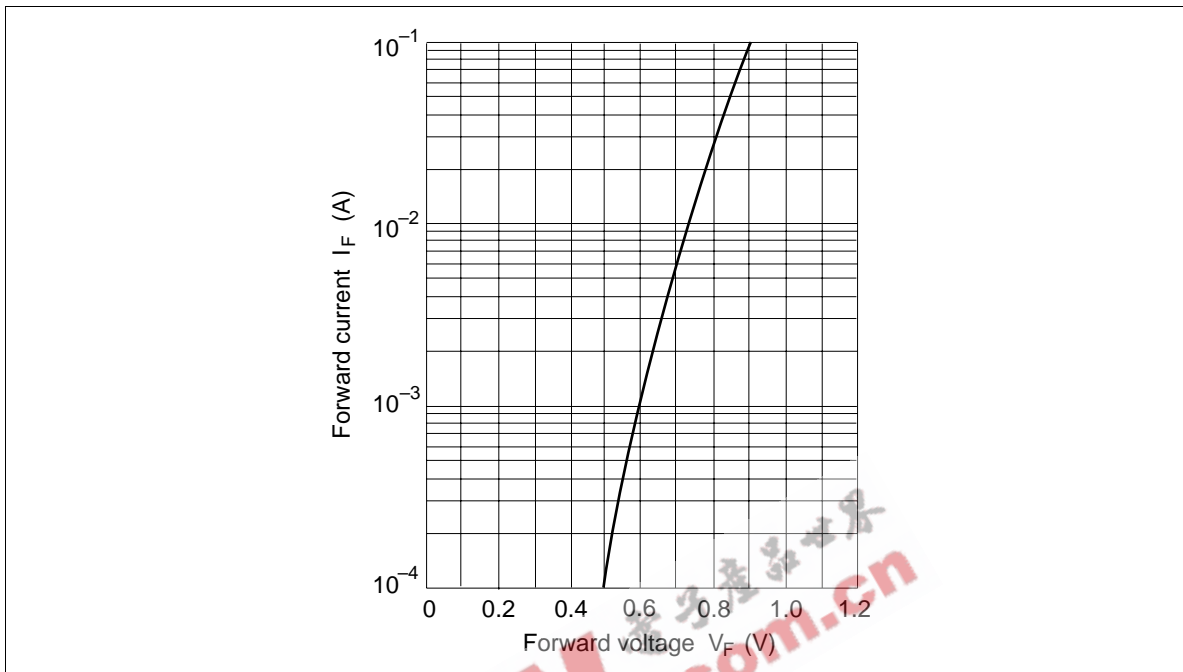


Fig.1 Forward current Vs. Forward voltage

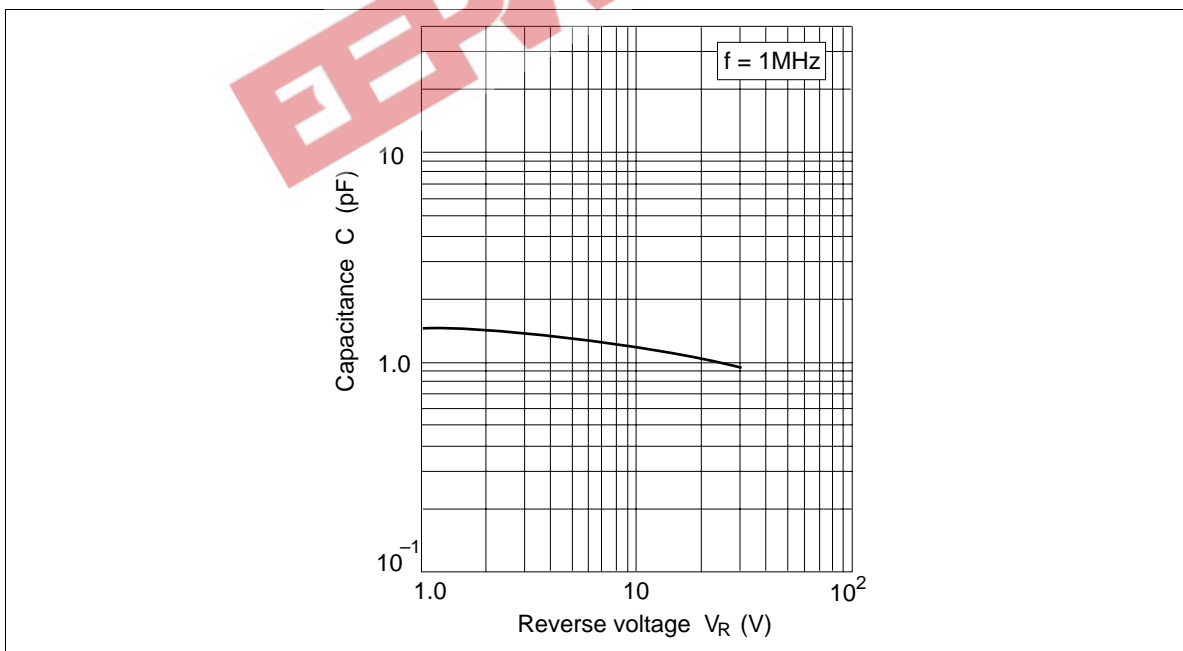
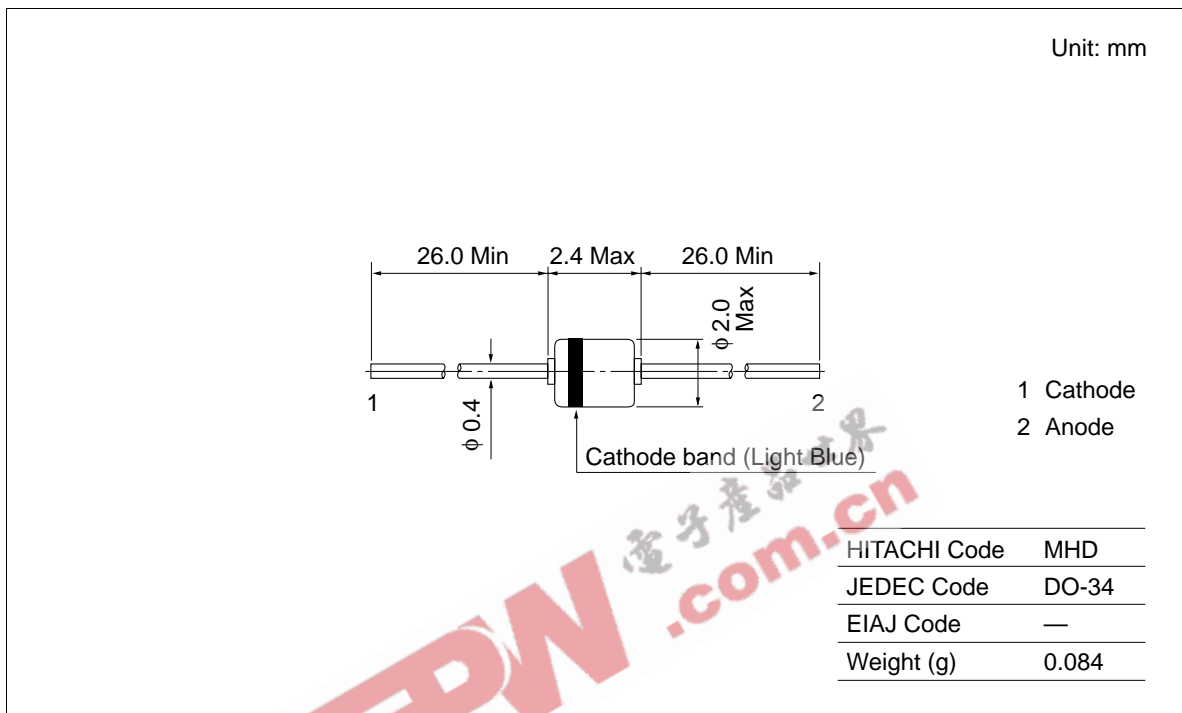


Fig.2 Capacitance Vs. Reverse voltage

1SS270

Package Dimensions



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