1SS119

Silicon Epitaxial Planar Diode for High Speed Switching

HITACHI

ADE-208-180A (Z)
Rev. 1
Aug. 1995

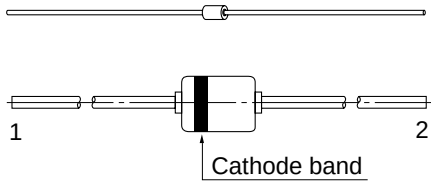
Features

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

Ordering Information

Type No.	Cathode band	Package Code
1SS119	Light Blue	MHD

Outline



1. Cathode
2. Anode

Hitachi semiconductor

Absolute Maximum Ratings (Ta = 25°C)

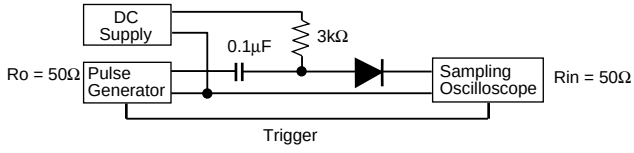
Item	Symbol	Value	Unit
Peak reverse voltage	V_{RM}	35	V
Reverse voltage	V_R	30	V
Peak forward current	I_{FM}	450	mA
Non-Repetitive peak forward surge current	I_{FSM}*	1	A
Average forward current	I_O	150	mA
Power dissipation	Pd	250	mW
Junction temperature	Tj	175	°C
Storage temperature	Tstg	–65 to +175	°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 = 10mA
Reverse current	I_R	—	—	0.1	µA	V_R = 30V
Capacitance	C	—	—	3.0	pF	V_R = 1V, f = 1MHz
Reverse recovery time	t_{rr}*	—	—	3.5	ns	I_F = 10mA, V_R = 6V, R_L = 50Ω

Note: Reverse recovery time test circuit



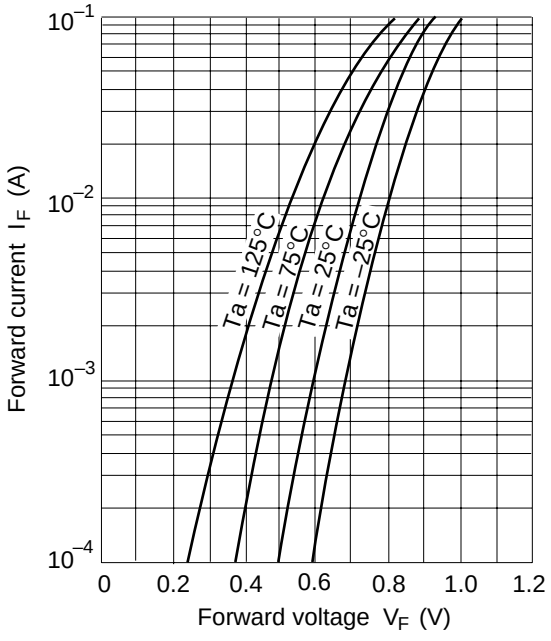


Fig.1 Forward current Vs. Forward voltage

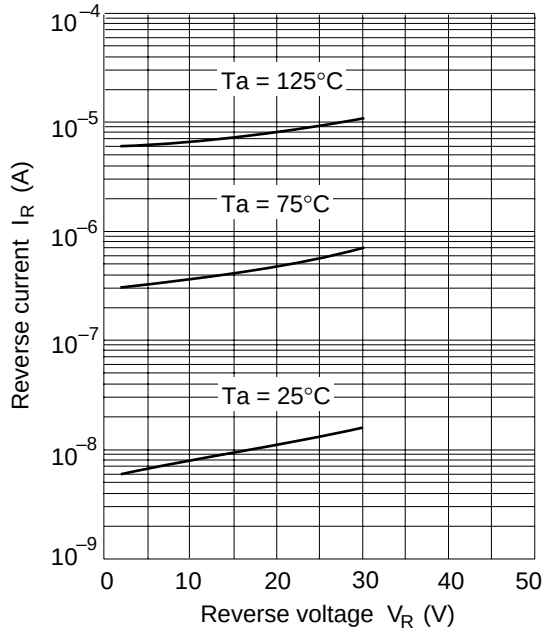


Fig.2 Reverse current Vs. Reverse voltage

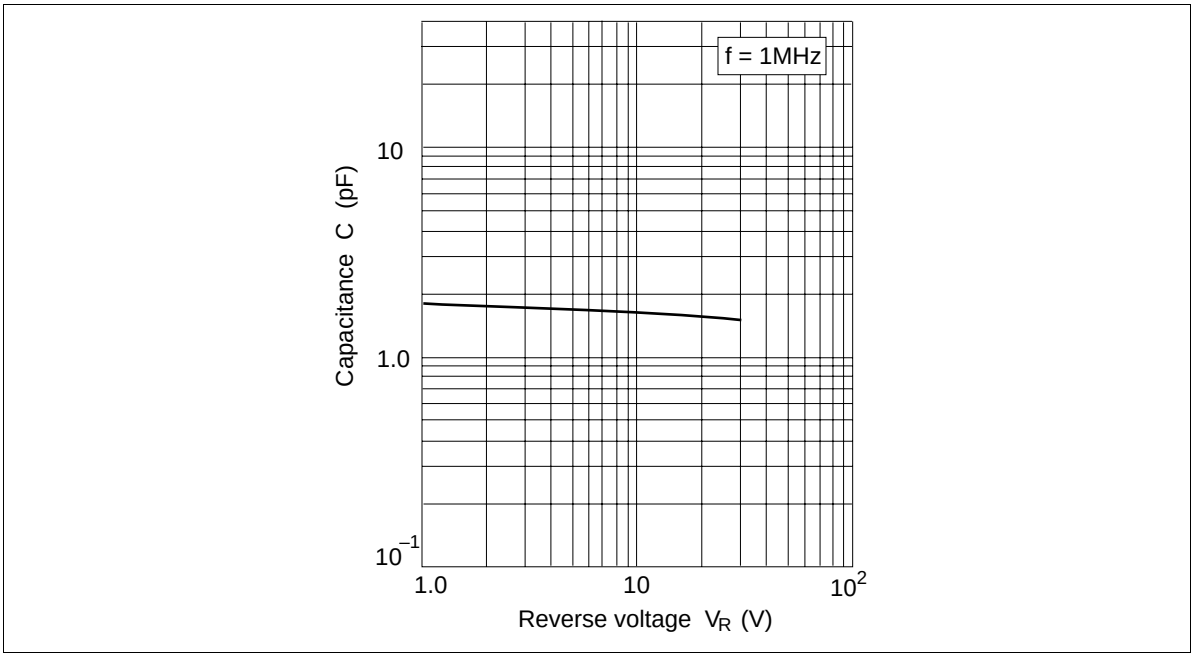
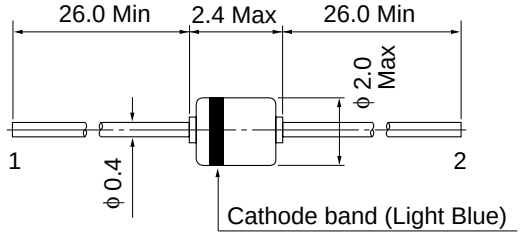


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm



1 Cathode
2 Anode

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

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