

1SS119

Silicon Epitaxial Planar Diode for High Speed Switching

HITACHI

ADE-208-180A (Z)

Rev. 1

Aug. 1995

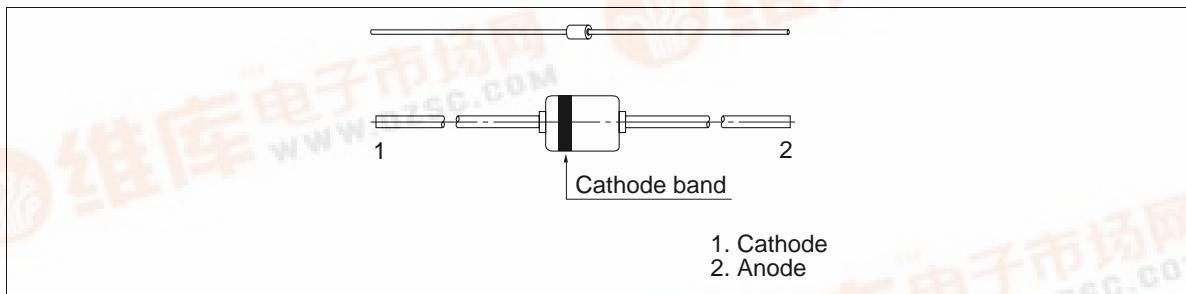
Features

- 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
1SS119	Light Blue	MHD

Outline



1SS119

Absolute Maximum Ratings (Ta = 25°C)

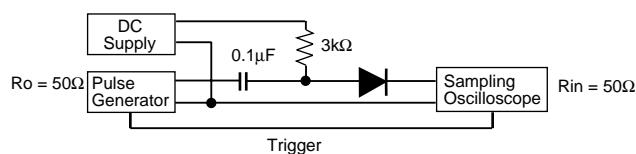
Item	Symbol	Value	Unit
Peak reverse voltage	V _{RM}	35	V
Reverse voltage	V _R	30	V
Peak forward current	I _{FM}	450	mA
Non-Repetitive peak forward surge current	I _{FSM} *	1	A
Average forward current	I _o	150	mA
Power dissipation	P _d	250	mW
Junction temperature	T _j	175	°C
Storage temperature	T _{stg}	-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



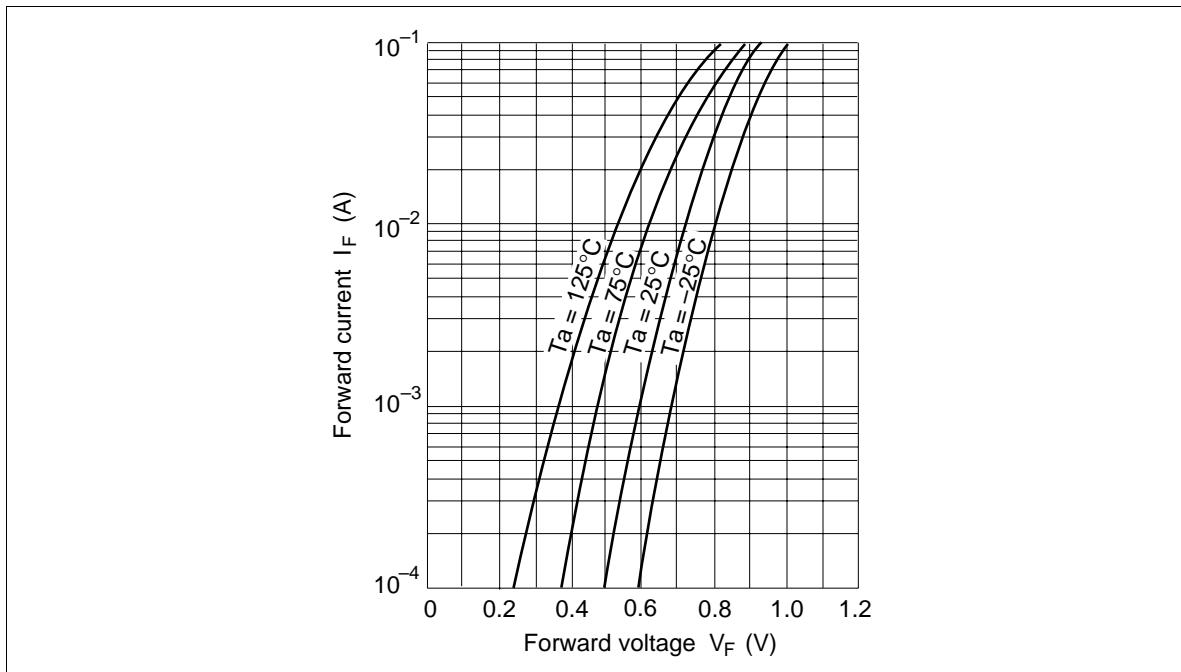


Fig.1 Forward current Vs. Forward voltage

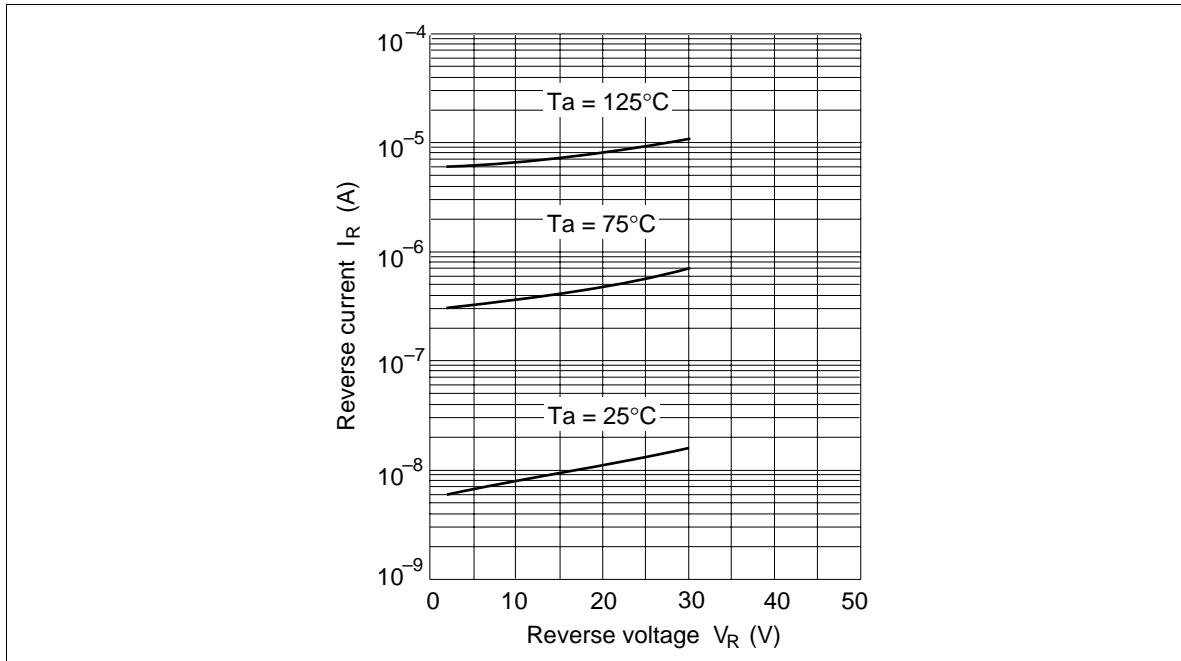


Fig.2 Reverse current Vs. Reverse voltage

1SS119

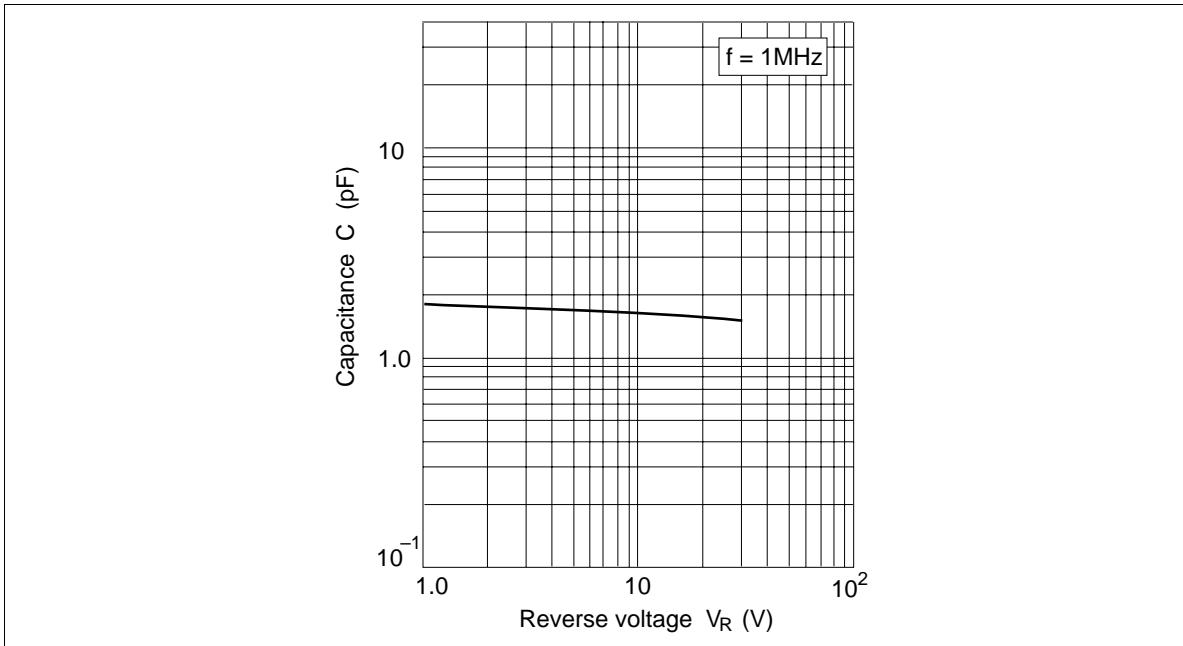
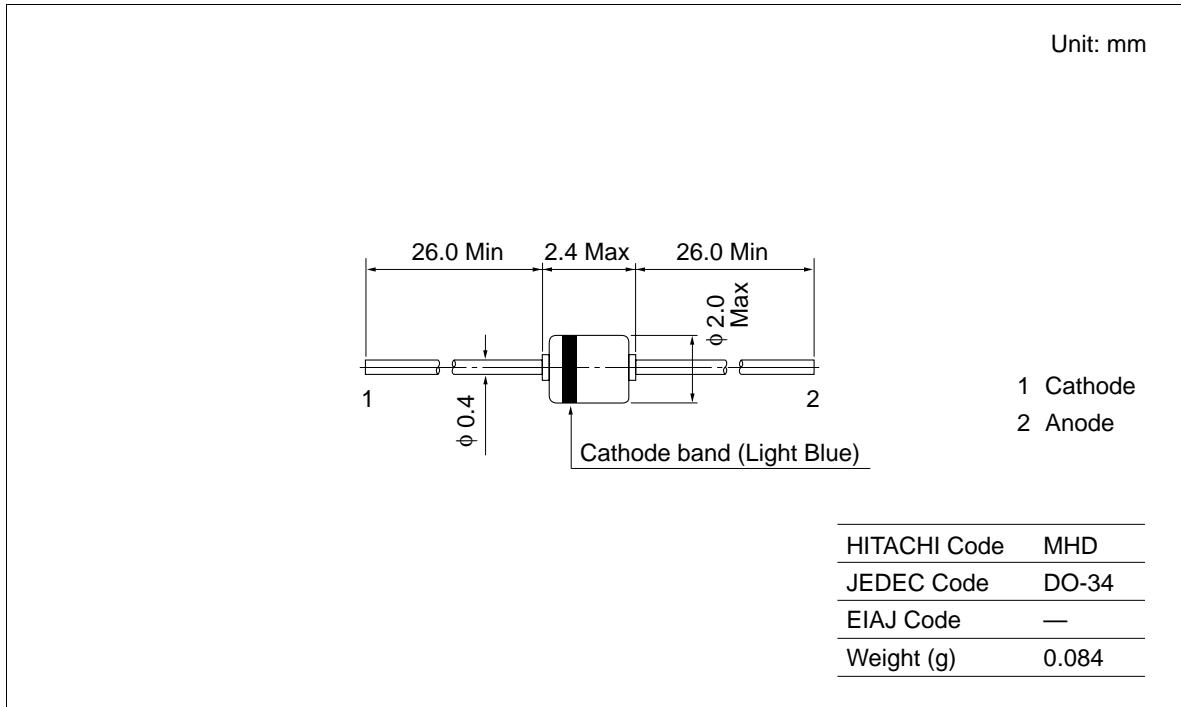


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

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