

1SS199

Silicon Schottky Barrier Diode for Various Detector,
High Speed Switching

HITACHI

ADE-208-299A (Z)
Rev. 1

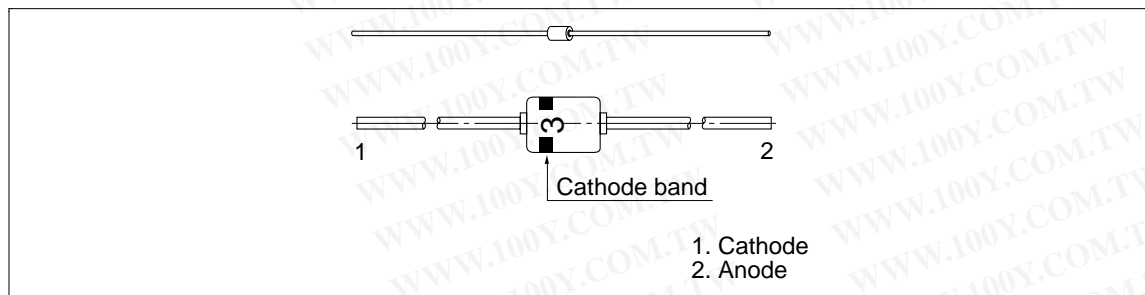
Features

- Detection efficiency is very good.
- Small temperature coefficient.
- Small glass package (MHD) enables easy mounting and high reliability.

Ordering Information

Type No.	Cathode band	Mark	Package Code
1SS199	Green	3	MHD

Outline



1SS199

Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V_R	30	V
Average rectified current	I_O	15	mA
Junction temperature	T_J	125	°C
Storage temperature	T_{stg}	-55 to +125	°C

Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward current	I_F	3.0	—	—	mA	$V_F = 1V$
Reverse current	I_R	—	—	100	μA	$V_R = 10V$
Capacitance	C	—	—	3.0	pF	$V_R = 1V, f = 1MHz$
Rectifier efficiency	η	70	—	—	%	$V_{in} = 2V_{rms}, f = 40MHz, R_L = 5k\Omega, C_L = 20pF$
ESD-Capability	—	70	—	—	V	*C = 200pF, Both forward and reverse direction 1 pulse.

Note: Failure criterion; $I_R \geq 200\mu A$ at $V_R = 10V$

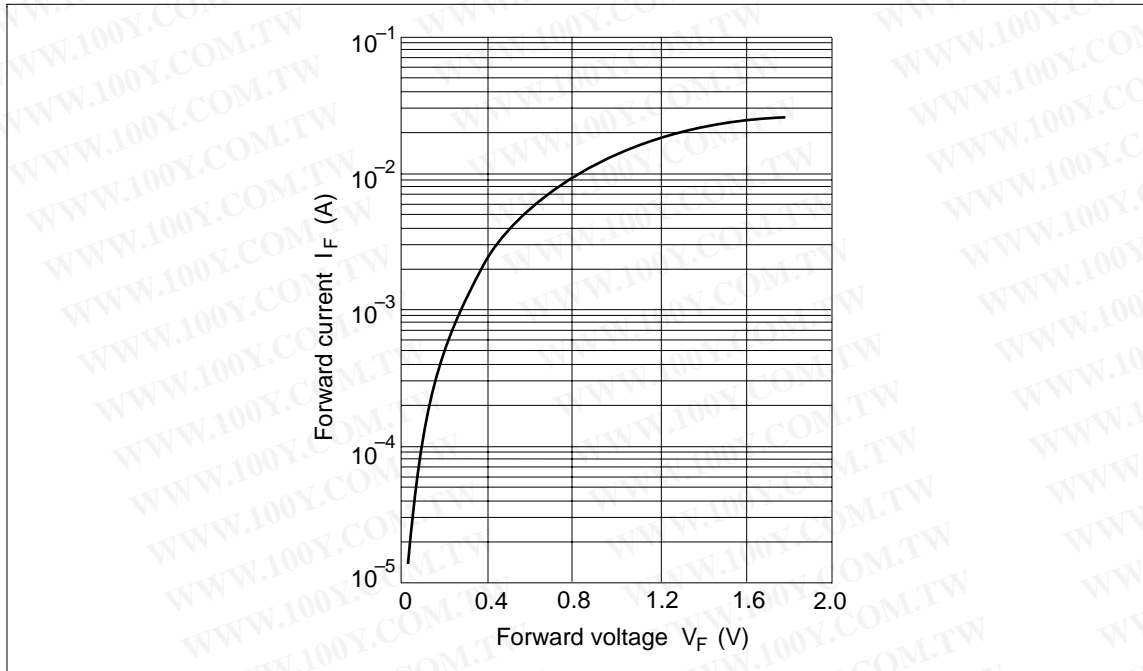


Fig.1 Forward current Vs. Forward voltage

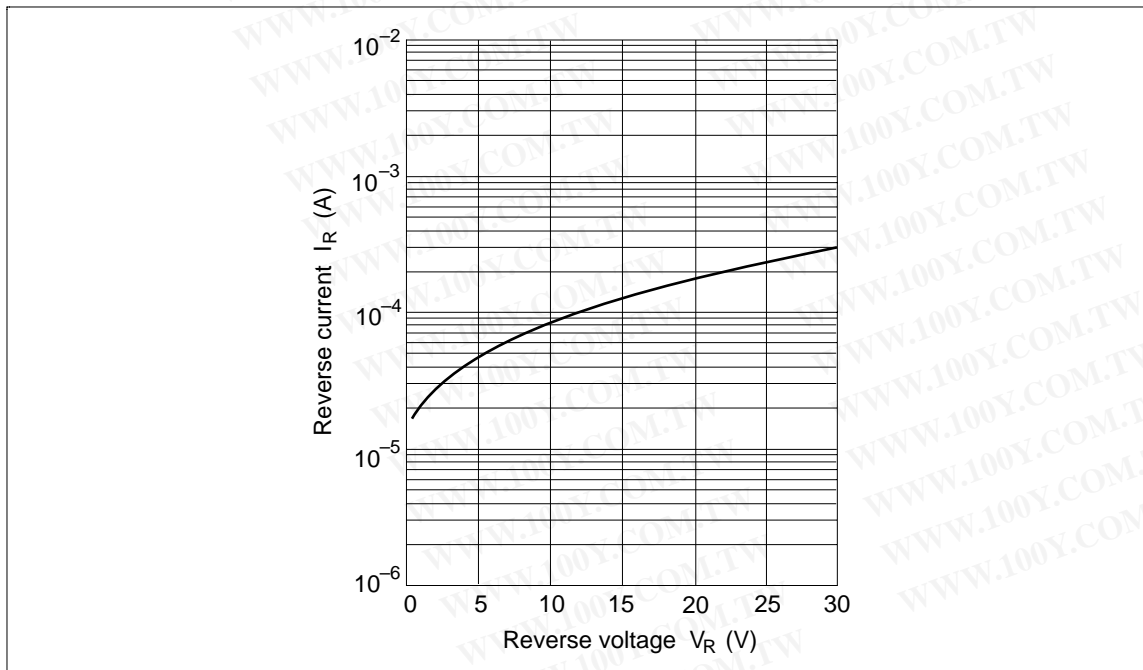


Fig.2 Reverse current Vs. Reverse voltage

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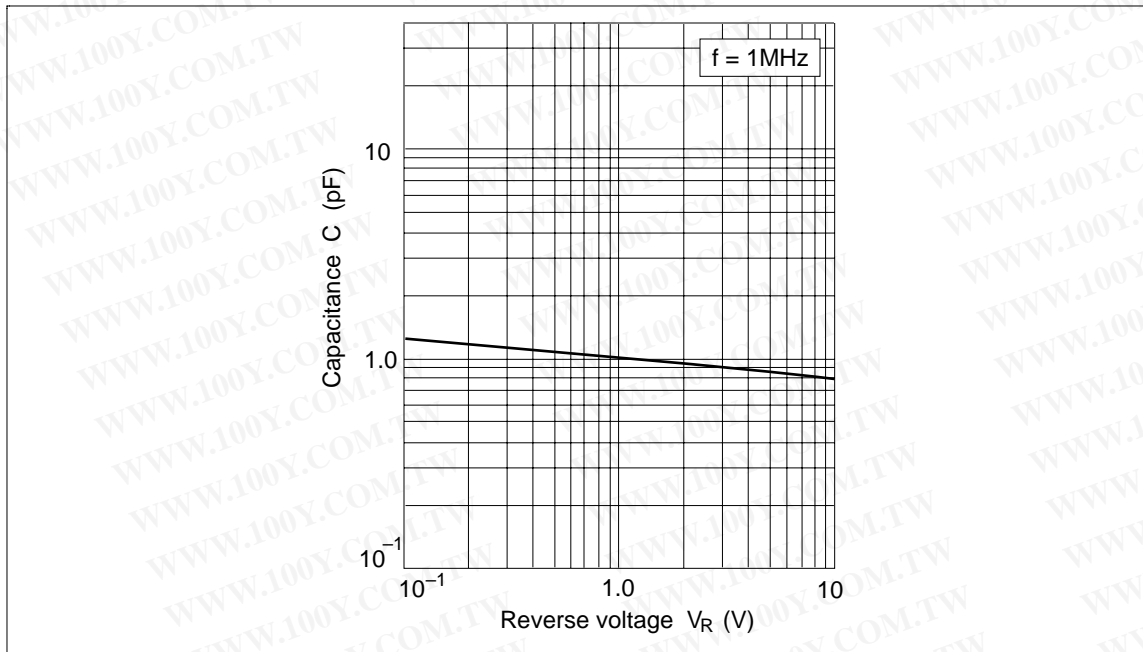


Fig.3 Capacitance Vs. Reverse voltage

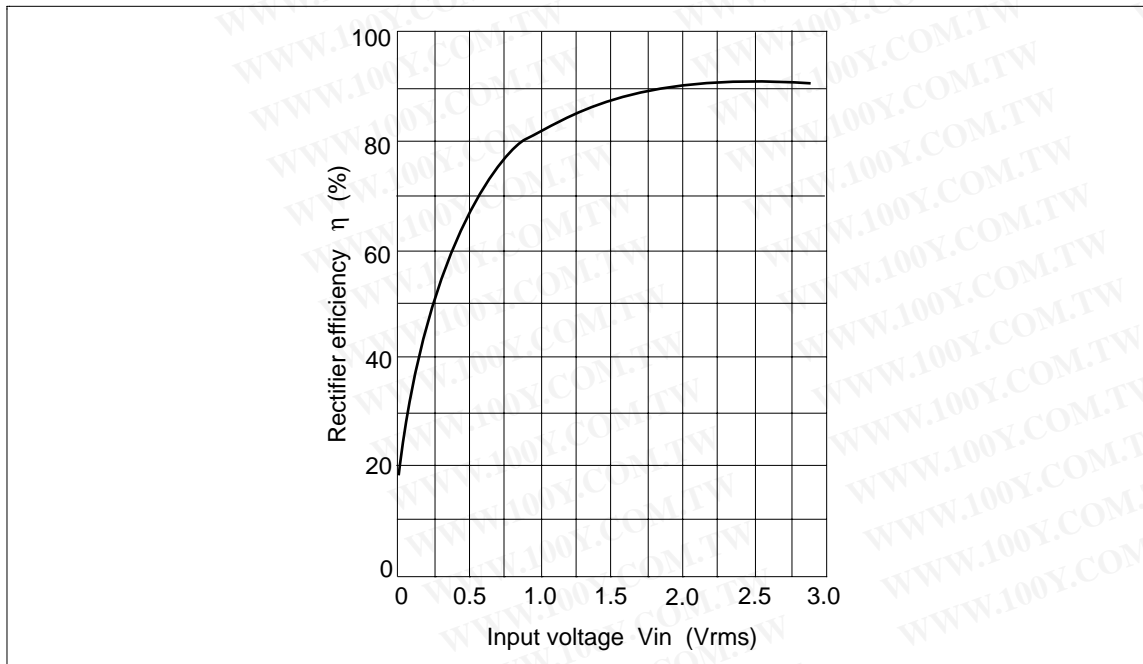


Fig.4 Rectifier efficiency Vs. Input voltage

Package Dimensions

