

# HSD278

Silicon Schottky Barrier Diode

# HITACHI

ADE-208-1015A (Z)

Rev.1

Jan. 2001

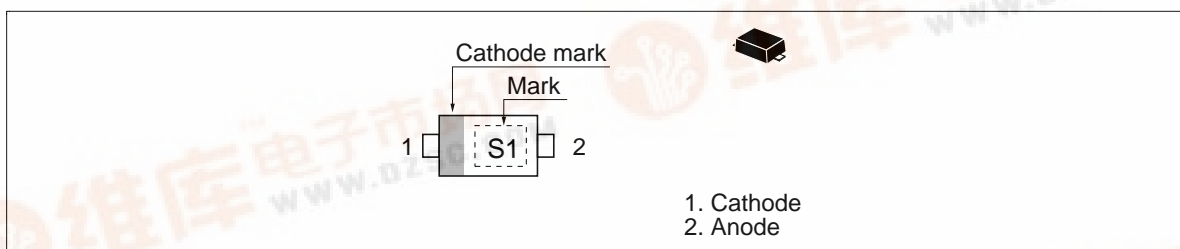
## Features

- Low forward voltage, Low capacitance.
- Super small Flat Package (SFP) is suitable for surface mount design.

## Ordering Information

Type No.	Laser Mark	Package Code
HSD278	S1	SFP

## Outline



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## HSD278

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### Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Repetitive peak reverse voltage	$V_{RRM}$	30	V
Reverse voltage	$V_R$	30	V
Non-Repetitive peak forward surge current	$I_{FSM}^*$	200	mA
Peak forward current	$I_{FM}$	150	mA
Average rectified current	$I_O$	30	mA
Junction temperature	Tj	125	°C
Storage temperature	Tstg	–55 to +125	°C

Note: 10 msec sine wave 1 pulse

### Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	$V_{F1}$	—	—	0.30	V	$I_F = 1\text{ mA}$
	$V_{F2}$	—	—	0.95		$I_F = 30\text{ mA}$
Reverse current	$I_R$	—	—	700	nA	$V_R = 10\text{ V}$
Capacitance	C	—	—	1.50	pF	$V_R = 1\text{ V}$ , $f = 1\text{ MHz}$
ESD-Capability <sup>*1</sup>	—	100	—	—	V	C = 200 pF, $R_L = 0\ \Omega$ , Both forward and reverse direction 1 pulse.

Notes: 1. Failure criterion ;  $I_R \geq 1.4\ \mu\text{A}$  at  $V_R = 10\text{ V}$

2. Please do not use the soldering iron due to avoid high stress to the SFP package.

## Main Characteristic

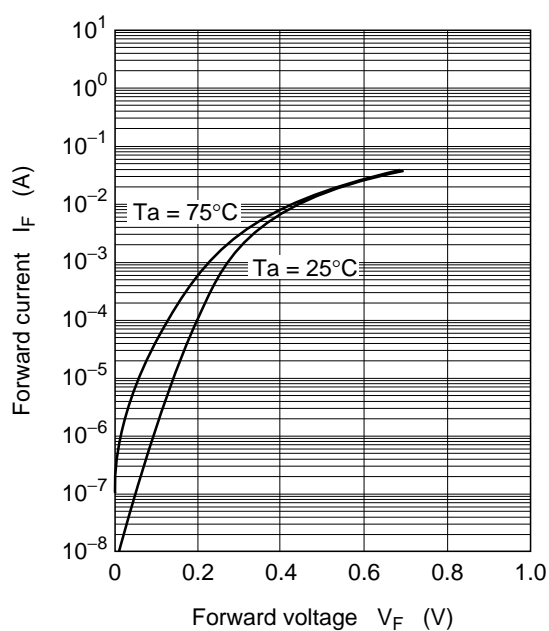


Fig.1 Forward current Vs. Forward voltage

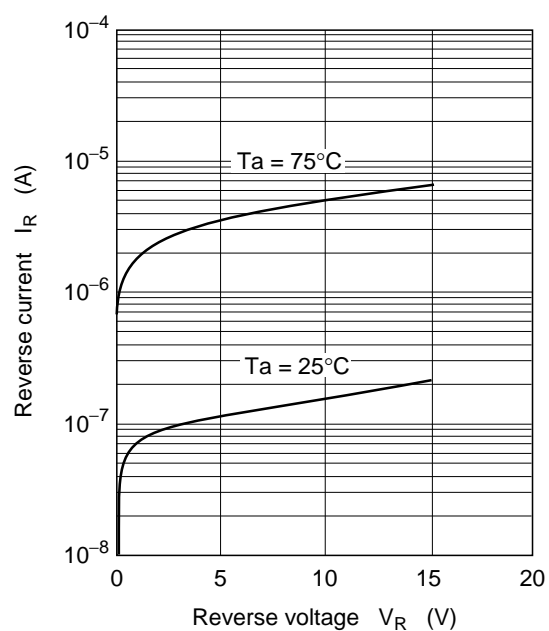


Fig.2 Reverse current Vs. Reverse voltage

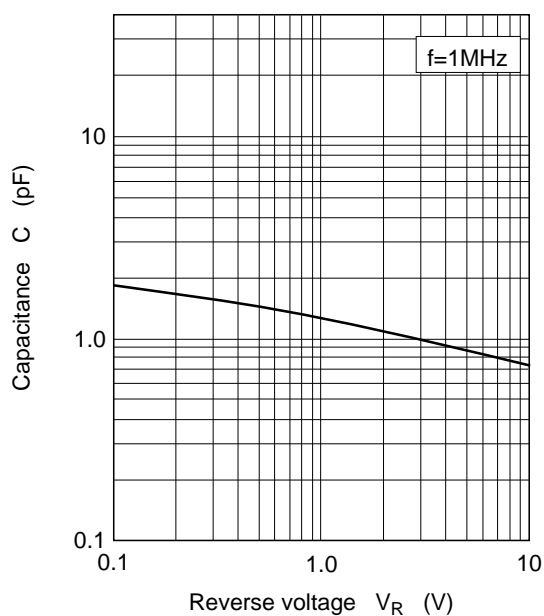
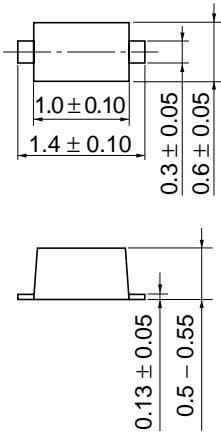


Fig.3 Capacitance Vs. Reverse voltage

HSD278

Package Dimensions

Unit: mm



Hitachi Code	SFP
JEDEC	—
EIAJ	—
Mass (reference value)	0.0010 g

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