

HSD278

Silicon Schottky Barrier Diode

HITACHI

ADE-208-1015A (Z)

Rev.1

Jan. 2001

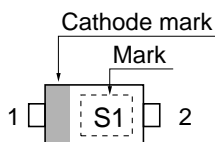
Features

- 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



1. Cathode
2. Anode

HSD278**Absolute Maximum Ratings** ($T_a = 25^{\circ}\text{C}$)

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	T_j	125	$^{\circ}\text{C}$
Storage temperature	T_{stg}	-55 to +125	$^{\circ}\text{C}$

Note: 10 msec sine wave 1 pulse

Electrical Characteristics ($T_a = 25^{\circ}\text{C}$)

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 ^{*1}	—	100	—	—	V	$C = 200 \text{ pF}$, $R_L = 0 \Omega$, 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

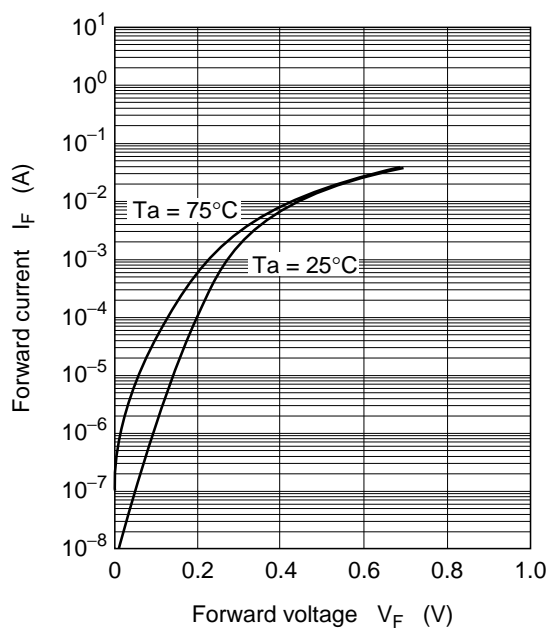


Fig.1 Forward current Vs. Forward voltage

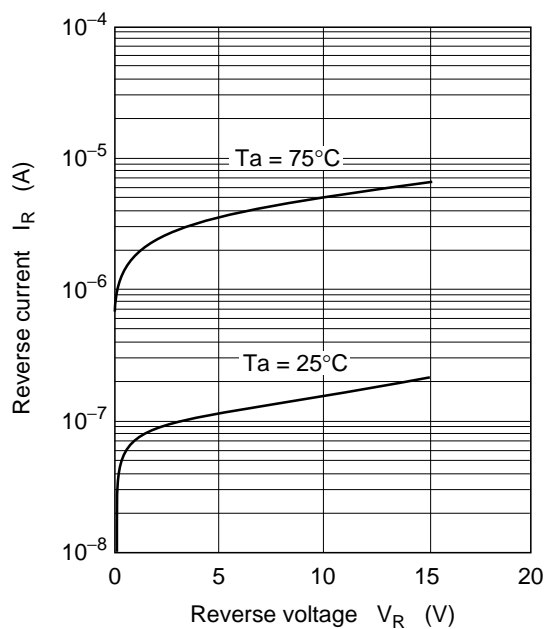


Fig.2 Reverse current Vs. Reverse voltage

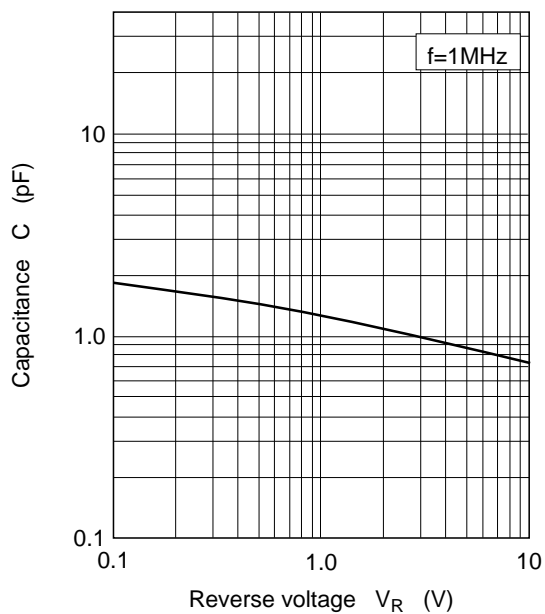
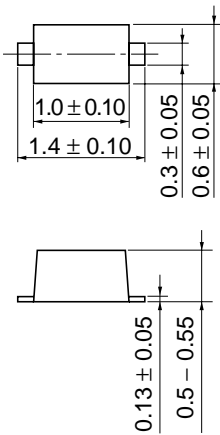


Fig.3 Capacitance Vs. Reverse voltage

HSD278

Package Dimensions

Unit: mm



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

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