

# HSD278

## Silicon Schottky Barrier Diode for Detector

REJ03G0605-0200  
 (Previous: ADE-208-1015A)  
 Rev.2.00  
 Apr 15, 2005

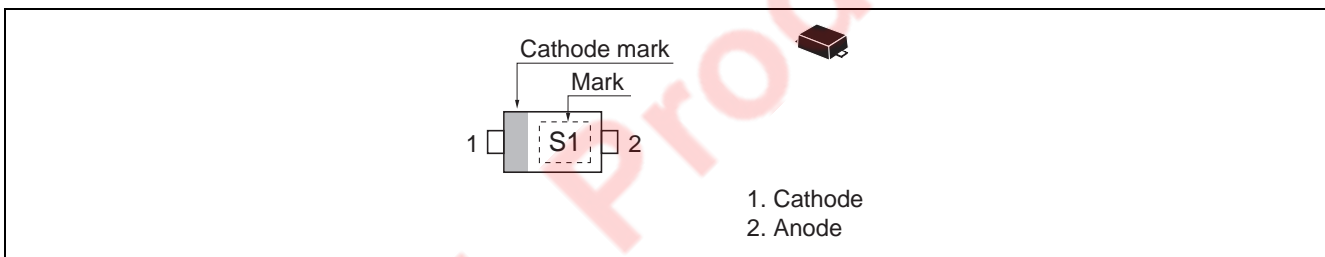
### Features

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

### Ordering Information

Type No.	Cathode Mark	Package Name	Package Code (Previous Code)
HSD278	S1	SFP	PUSF0002ZB-A (SFP)

### Pin Arrangement



## 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	$T_j$	125	°C
Storage temperature	$T_{stg}$	-55 to +125	°C

Note: 10 ms 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	—	—	1.5	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

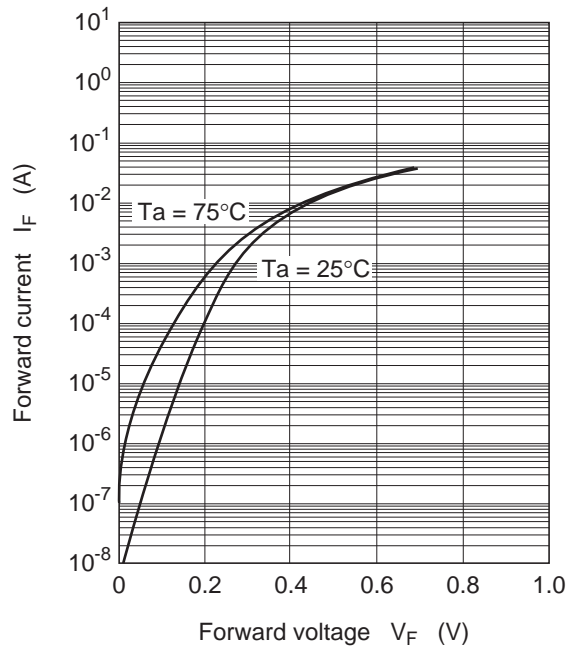


Fig.1 Forward current vs. Forward voltage

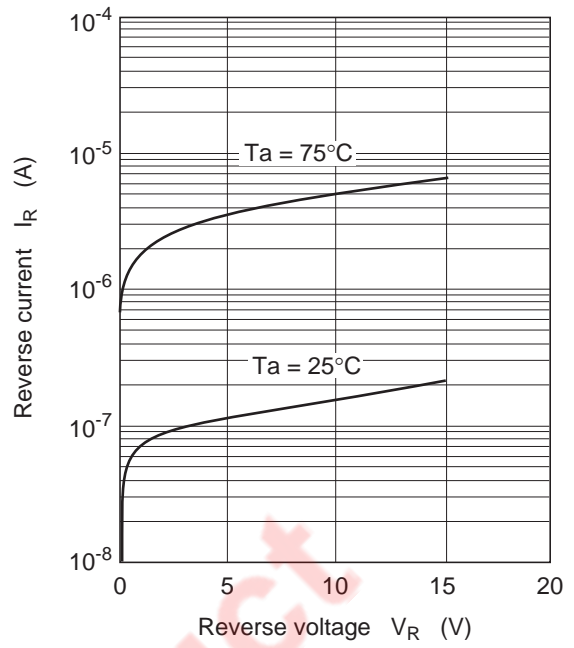


Fig.2 Reverse current vs. Reverse voltage

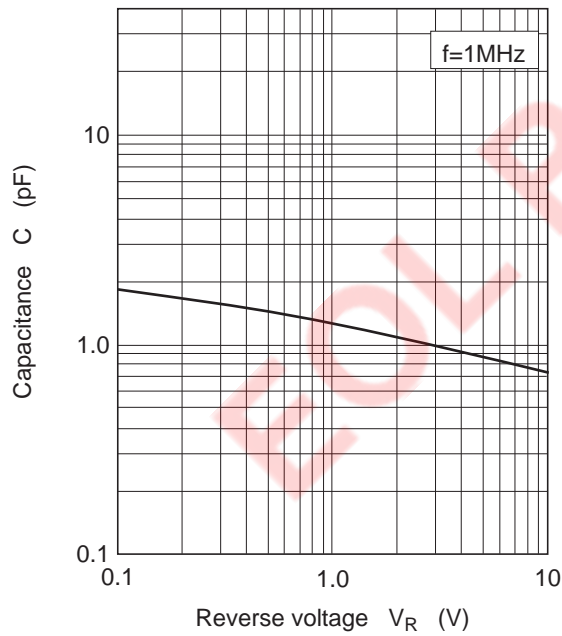
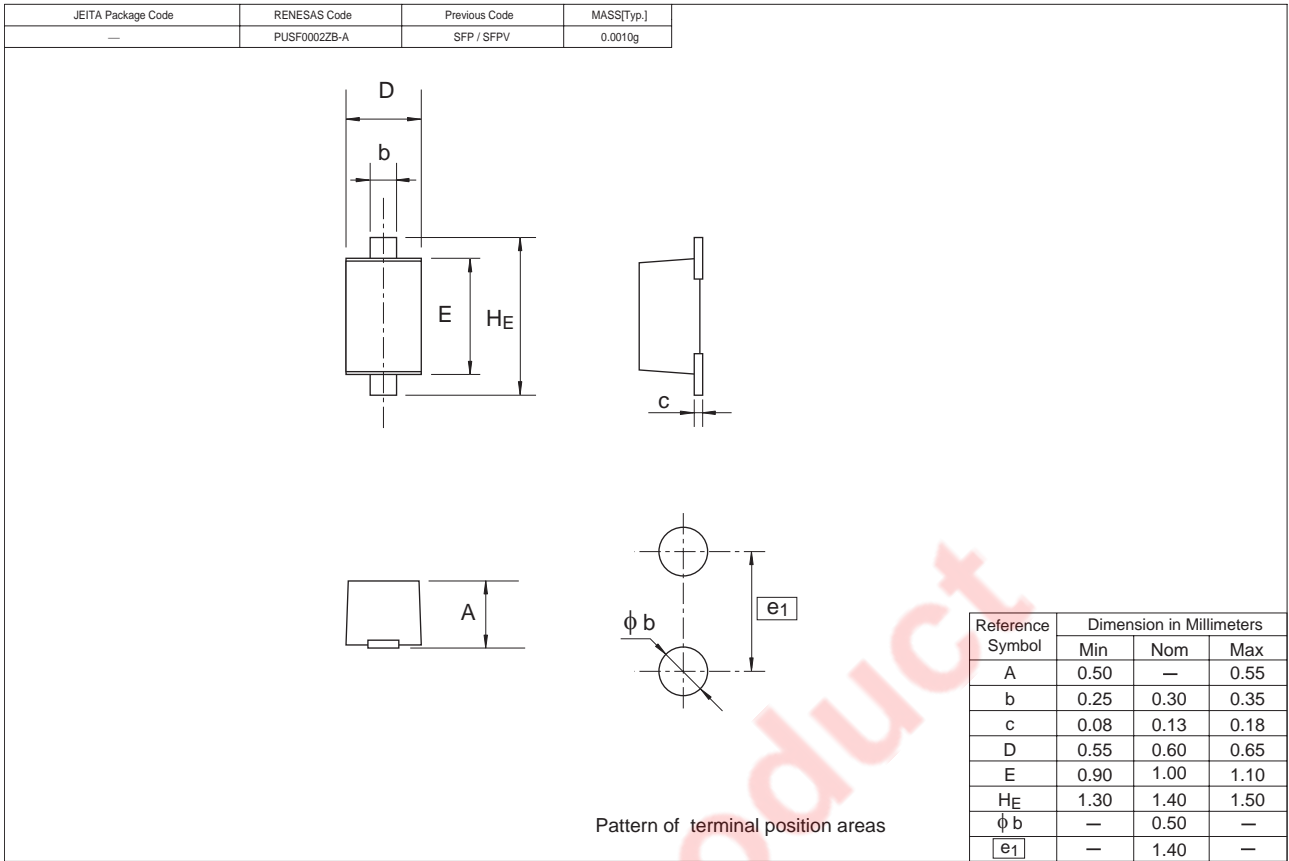


Fig.3 Capacitance vs. Reverse voltage

Package Dimensions



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