

HSB278S

Silicon Schottky Barrier Diode for Detector

REJ03G0596-0100
 (Previous: ADE-208-1383)
 Rev.1.00
 Apr 12, 2005

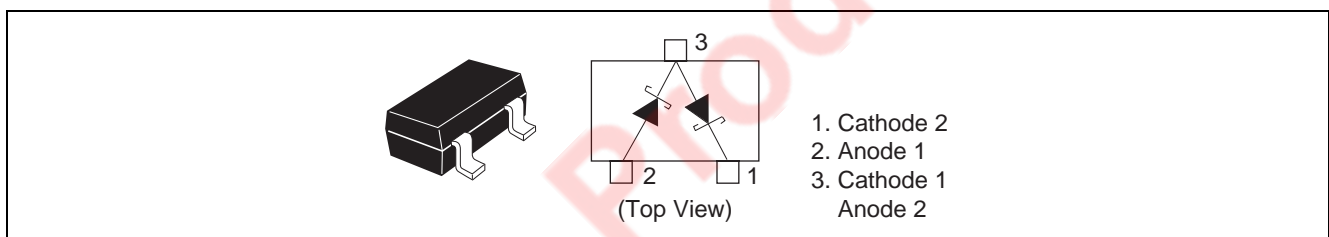
Features

- Low forward voltage, Low capacitance.
- CML package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Name	Package Code (Previous Code)
HSB278S	S2	CML	PTSP0003ZB-A (CML)

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	$I_{FSM}^{*1 *2}$	200	mA
Peak forward current	I_{FM}^{*2}	150	mA
Average rectified current	I_O^{*2}	30	mA
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-55 to +125	°C

- Notes: 1. 10 ms sine wave 1 pulse.
 2. Per one device.

Electrical Characteristics *1

(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 *2	C	—	—	1.50	pF	$V_R = 1 \text{ V}, f = 1 \text{ MHz}$
ESD-Capability *1	—	100	—	—	V	C = 200 pF, $R_L = 0 \Omega$, Both forward and reverse direction 1 pulse.

- Notes: 1. Per one device.
 2. Failure criterion ; $I_R > 1.4 \mu\text{A}$ at $V_R = 10 \text{ V}$

Main Characteristic

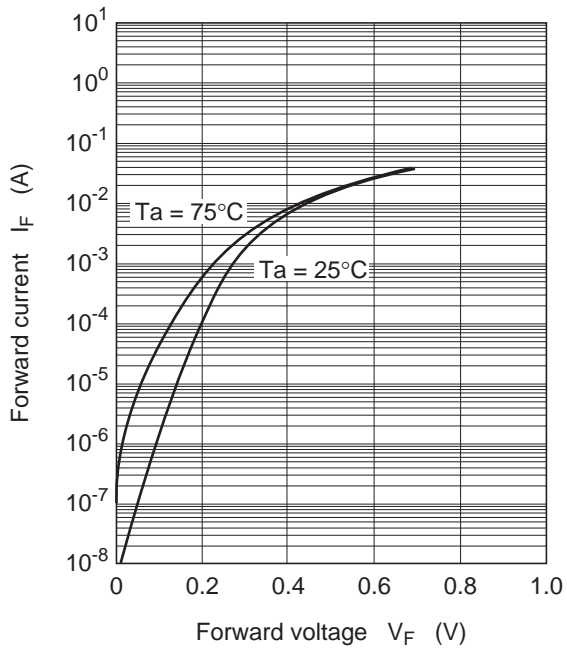


Fig.1 Forward current vs. Forward voltage

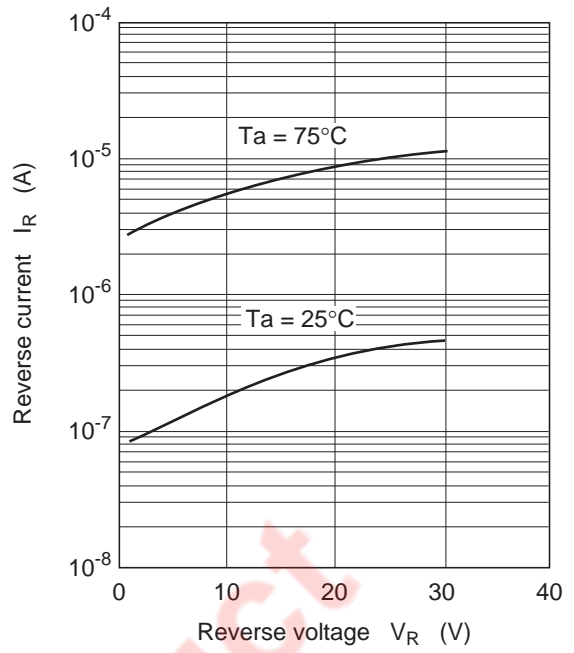


Fig.2 Reverse current vs. Reverse voltage

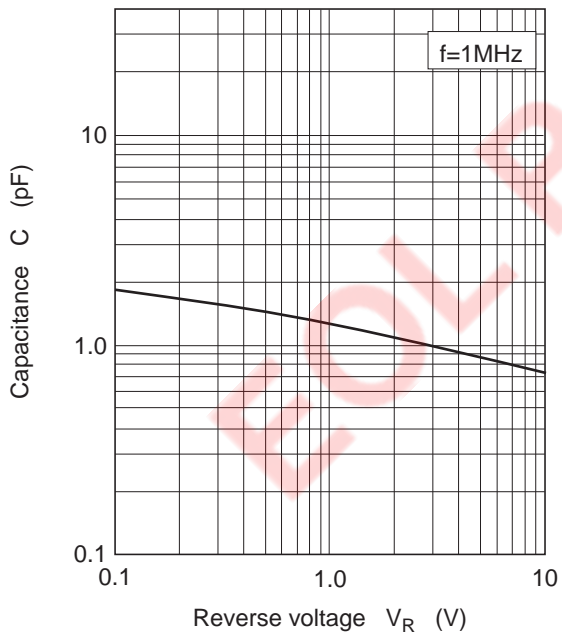
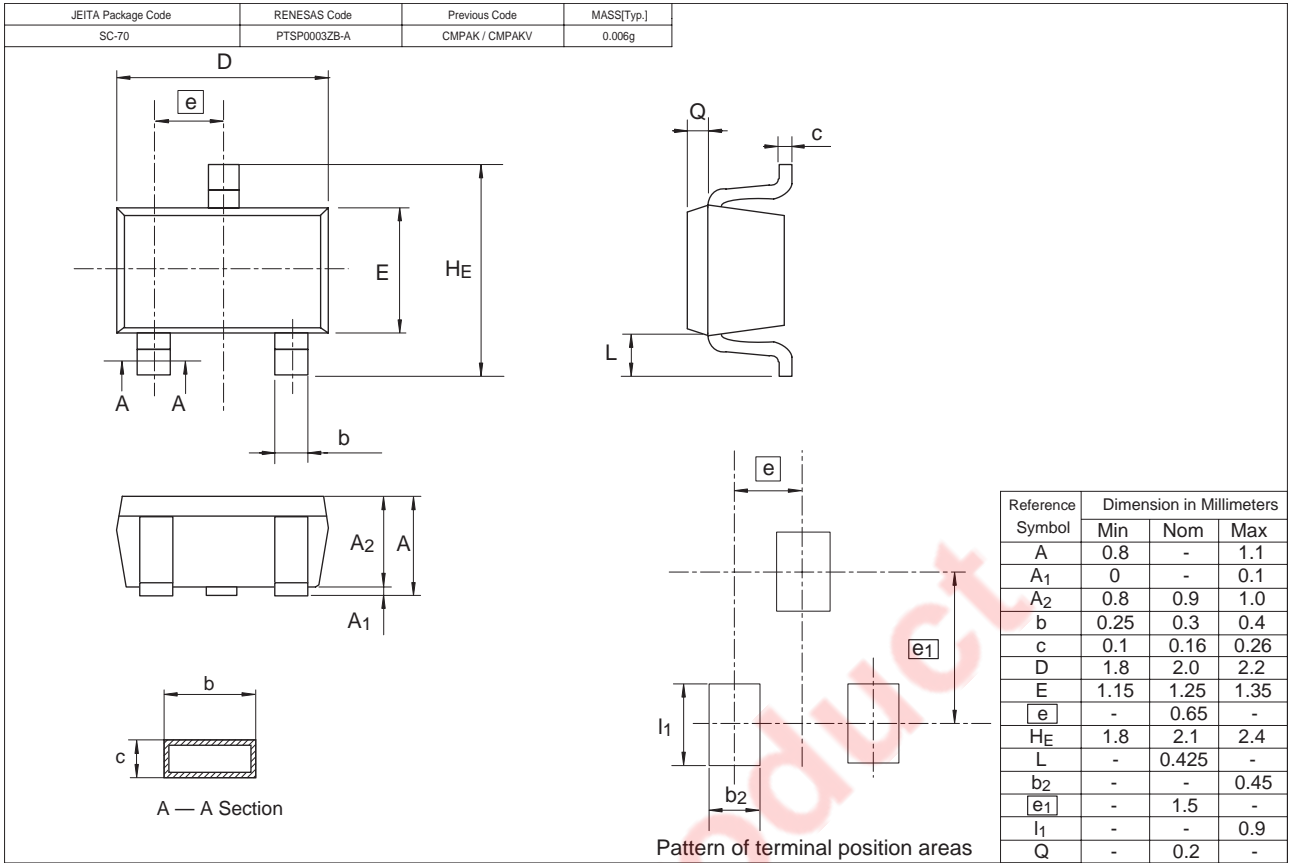


Fig.3 Capacitance vs. Reverse voltage

Package Dimensions



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April 1st, 2010
Renesas Electronics Corporation

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