HSL278

Silicon Schottky Barrier Diode for Detector

REJ03G0606-0100
(Previous: ADE-208-1564)
Rev.1.00
Apr 20, 2005

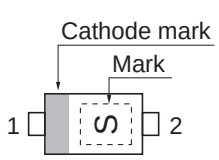
Features

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

Ordering Information

Type No.	Laser Mark	Package Name	Package Code (Previous Code)
HSL278	S	EFP	PXSF0002ZA-A (EFP)

Pin Arrangement





1. Cathode
2. Anode

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Repetitive peak reverse voltage	V_{RRM}	30	V
Reverse voltage	V_R	30	V
Average rectified current	I_O	30	mA
Non-Repetitive peak forward surge current	I_{FSM} *	200	mA
Peak forward current	I_{FM}	150	mA
Junction temperature	Tj	125	°C
Storage temperature	Tstg	−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 mA
	V_{F2}	—	—	0.95		I_F = 30 mA
Reverse current	I_R	—	—	700	nA	V_R = 10 V
Capacitance	C	—	—	1.5	pF	V_R = 1 V, f = 1 MHz
ESD-Capability *[1]	—	100	—	—	V	C = 200 pF, R_L = 0 Ω, Both forward and reverse direction 1 pulse.

Notes: 1. Failure criterion ; $I_R \geq 1.4$ μA at V_R =10 V

2. Please do not use the soldering iron due to avoid high stress to the EFP package.
3. The material of lead is exposed for cutting plane. There for, soldering nature of lead tip part is considered as unquestioned. Please kindly consider soldering nature.

Main Characteristic

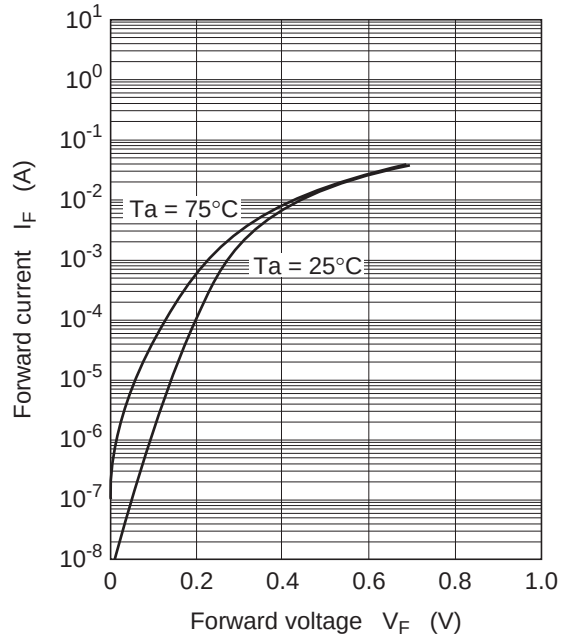


Fig.1 Forward current vs. Forward voltage

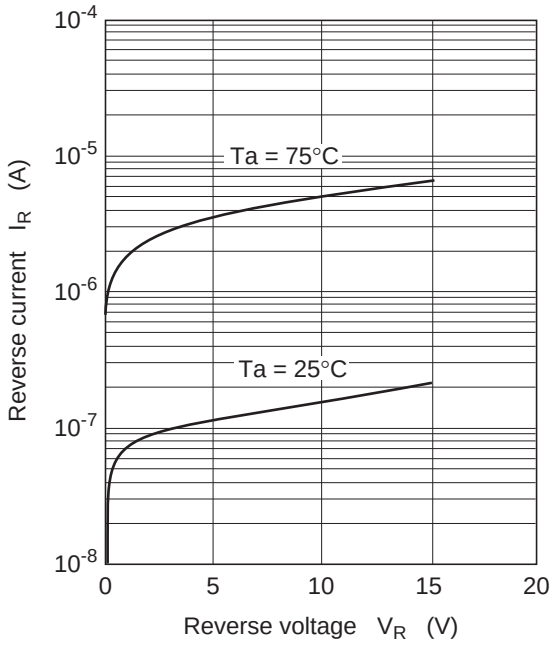


Fig.2 Reverse current vs. Reverse voltage

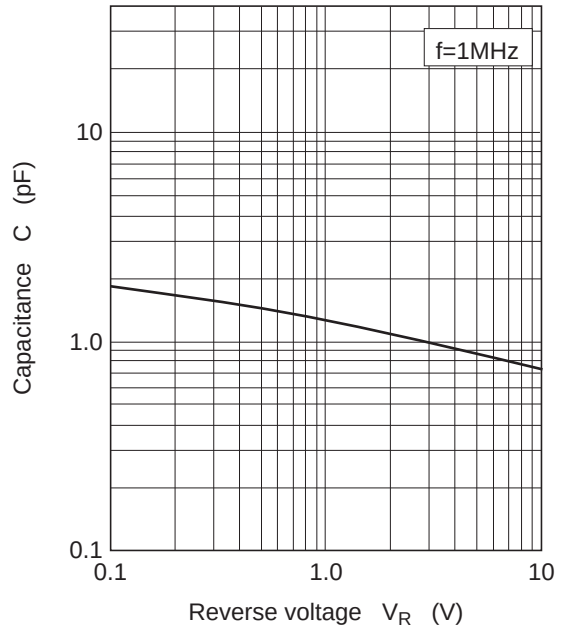
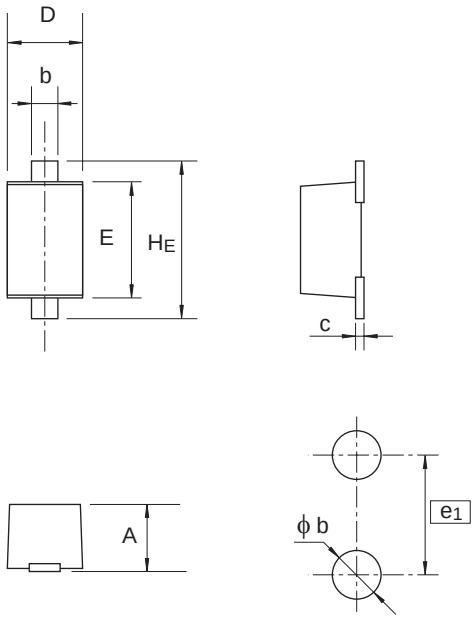


Fig.3 Capacitance vs. Reverse voltage

Package Dimensions

JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]
—	PXSF0002ZA-A	EFP / EFPV	0.0007g



Pattern of terminal position areas

Reference Symbol	Dimension in Millimeters		
	Min	Nom	Max
A	0.44	0.47	0.50
b	0.25	0.30	0.35
c	0.08	0.13	0.18
D	0.55	0.60	0.65
E	0.75	0.80	0.85
H_E	0.95	1.00	1.05
ϕ b	—	0.40	—
e_1	—	1.00	—

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Renesas Technology America, Inc.
450 Holger Way, San Jose, CA 95134-1368, U.S.A
Tel: <1> (408) 382-7500, Fax: <1> (408) 382-7501

Renesas Technology Europe Limited
Dukes Meadow, Millboard Road, Bourne End, Buckinghamshire, SL8 5FH, U.K.
Tel: <44> (1628) 585-100, Fax: <44> (1628) 585-900

Renesas Technology Hong Kong Ltd.
7th Floor, North Tower, World Finance Centre, Harbour City, 1 Canton Road, Tsimshatsui, Kowloon, Hong Kong
Tel: <852> 2265-6688, Fax: <852> 2730-6071

Renesas Technology Taiwan Co., Ltd.
10th Floor, No.99, Fushing North Road, Taipei, Taiwan
Tel: <886> (2) 2715-2888, Fax: <886> (2) 2713-2999

Renesas Technology (Shanghai) Co., Ltd.
Unit2607 Ruijing Building, No.205 Maoming Road (S), Shanghai 200020, China
Tel: <86> (21) 6472-1001, Fax: <86> (21) 6415-2952

Renesas Technology Singapore Pte. Ltd.
1 Harbour Front Avenue, #06-10, Keppel Bay Tower, Singapore 098632
Tel: <65> 6213-0200, Fax: <65> 6278-8001

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