

HVU359

Variable Capacitance Diode for VCO

REJ03G0507-0500
(Previous: ADE-208-023D)
Rev.5.00
Jan 28, 2005

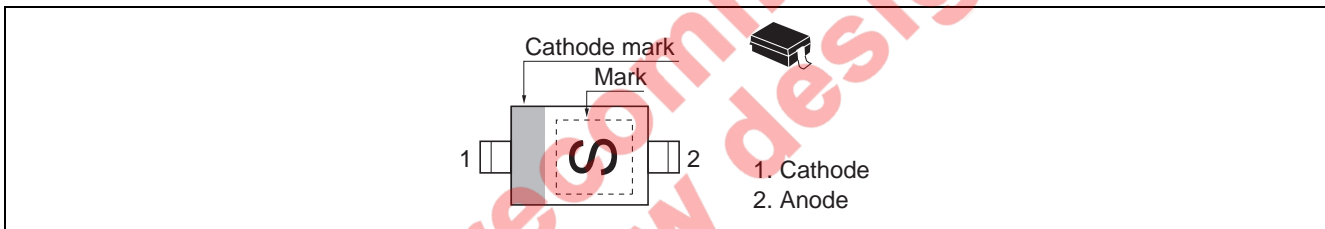
Features

- High capacitance ratio and good C-V linearity.
- To be usable at low voltage.
- Ultra small Resin Package (URP) is suitable for surface mount design.

Ordering Information

Type No.	Laser Mark	Renesas Code	Previous Code
HVU359	S	PTSP0002ZA-A	URP

Pin Arrangement



Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V _R	15	V
Junction temperature	T _j	125	°C
Storage temperature	T _{stg}	-55 to +125	°C

Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse current	I _{R1}	—	—	10	nA	V _R = 10 V
	I _{R2}	—	—	100		V _R = 10 V, Ta = 60°C
Capacitance	C ₁	24.8	—	29.8	pF	V _R = 1 V, f = 1 MHz
	C ₄	6.0	—	8.3		V _R = 4 V, f = 1 MHz
Capacitance ratio	n	3.0	—	—	—	C ₁ /C ₄
Series resistance	r _s	—	—	1.5	Ω	V _R = 4 V, f = 100 MHz
ESD-Capability *1	—	200	—	—	V	C = 200 pF, R = 0 Ω, Both forward and reverse direction 1 pulse.

Note: 1. Failure criterion ; I_R ≥ 20 nA at V_R = 10 V

Not recommended for new designs

Main Characteristic

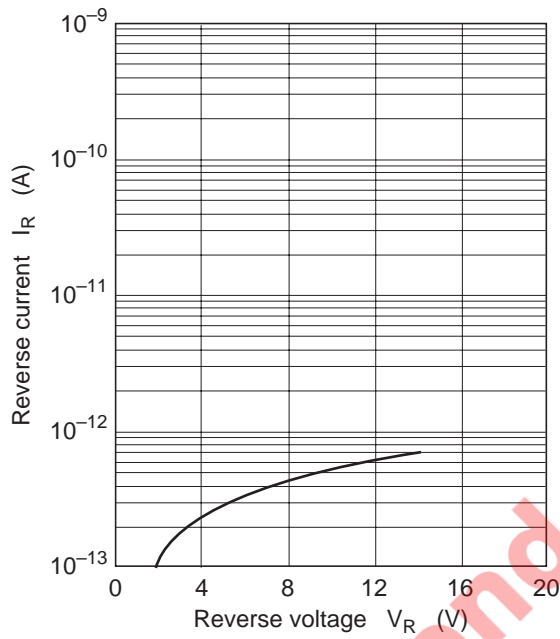


Fig.1 Reverse Current vs. Reverse Voltage

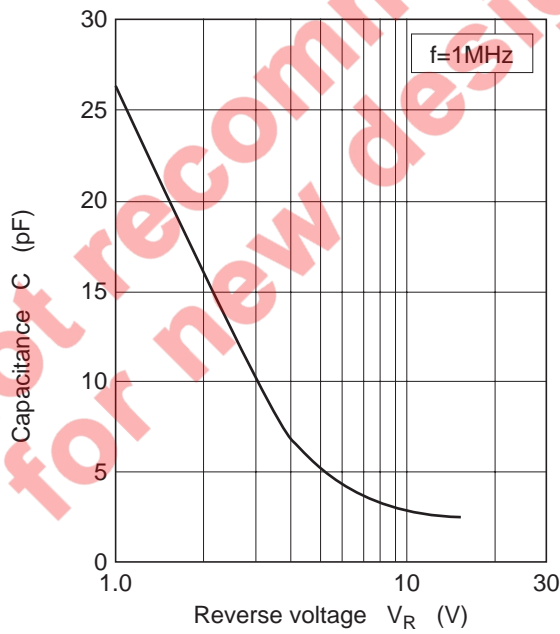
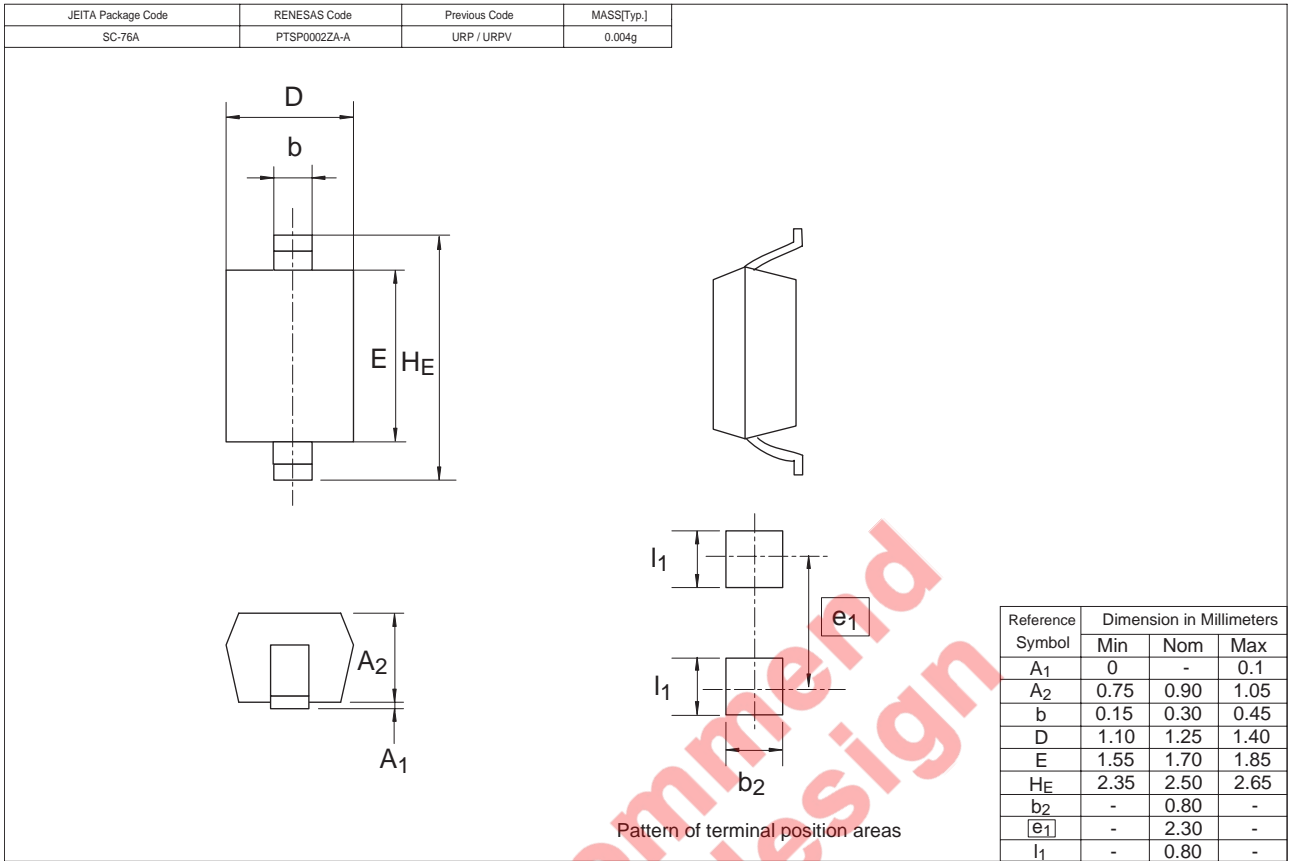


Fig.2 Capacitance vs. Reverse Voltage

Package Dimensions



Not recommended for new design

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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.
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Tel: <852> 2265-6688, Fax: <852> 2730-6071

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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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April 1st, 2010
Renesas Electronics Corporation

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