

HVC362

Variable Capacitance Diode for VCO

REJ03G0086-0100Z
(Previous: ADE-208-456)
Rev.1.00
Sep.17.2003

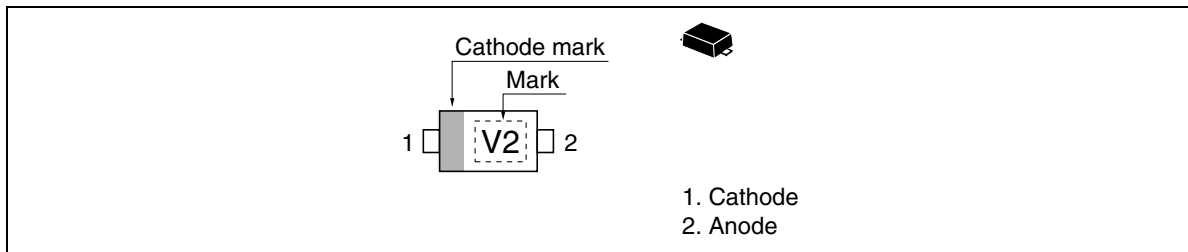
Features

- High capacitance ratio. (n = 3.0.min)
- Good C-V linearity.
- Ultra small Flat Package (UFP) is suitable for surface mount design.

Ordering Information

Type No.	Laser Mark	Package Code
HVC362	V2	UFP

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	$V_R = 10\text{ V}$
	I_{R2}	—	—	100		$V_R = 10\text{ V}$, $T_a = 60^\circ\text{C}$
Capacitance	C_1	41.6	—	49.9	pF	$V_R = 1\text{ V}$, $f = 1\text{ MHz}$
	C_4	10.1	—	14.8		$V_R = 4\text{ V}$, $f = 1\text{ MHz}$
Capacitance ratio	n	3.0	—	—	—	C_1/C_4
Series resistance	r_s	—	—	2.0	Ω	$V_R = 4\text{ V}$, $f = 100\text{ MHz}$
ESD-Capability *1	—	80	—	—	V	$C = 200\text{ pF}$, Both forward and reverse direction 1 pulse.

Note: 1. Failure criterion; $I_R \geq 20\text{ nA}$ at $V_R = 10\text{ V}$

Main Characteristic

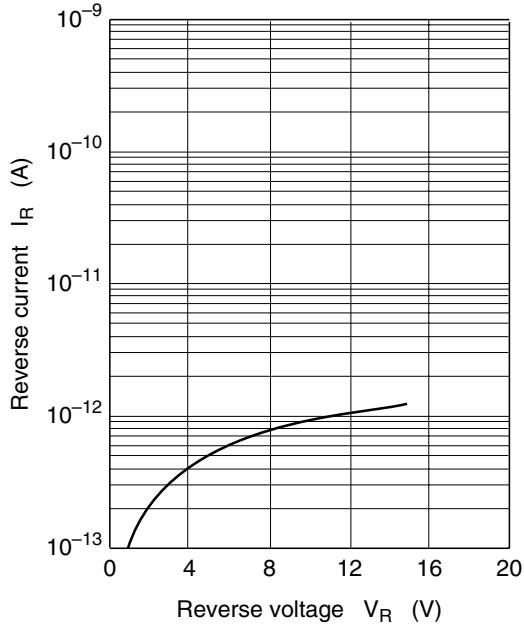


Fig.1 Reverse current vs. Reverse voltage

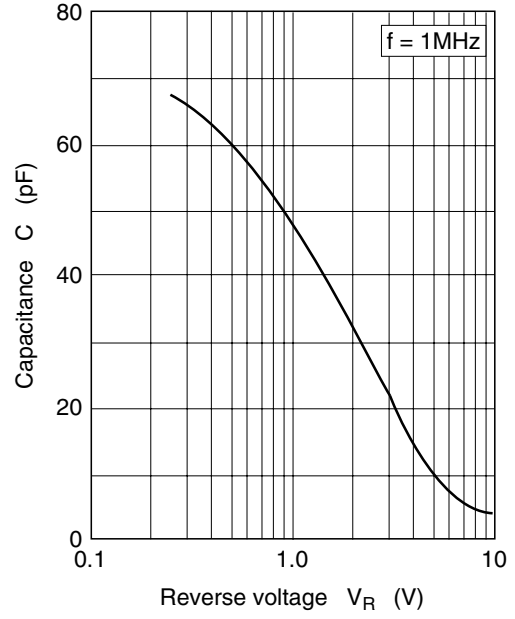


Fig.2 Capacitance vs. Reverse voltage

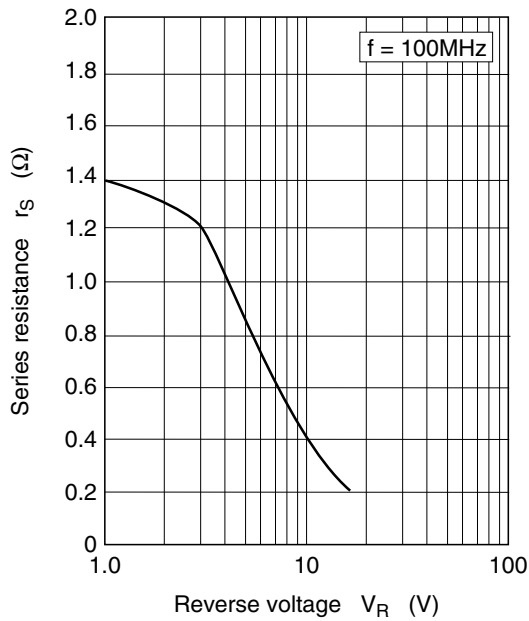


Fig.3 Series resistance vs. Reverse voltage

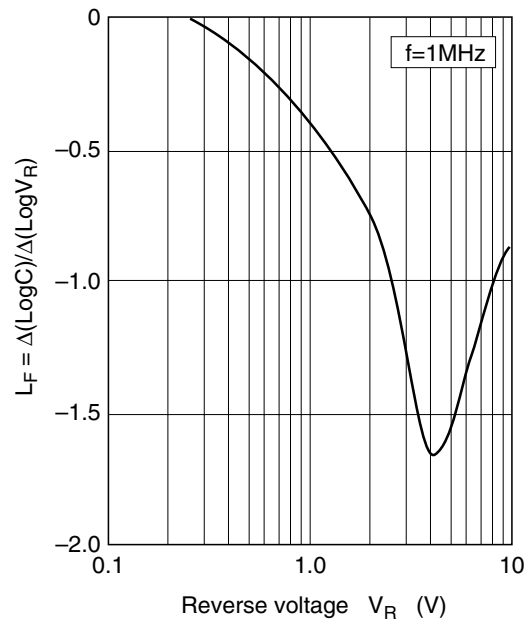
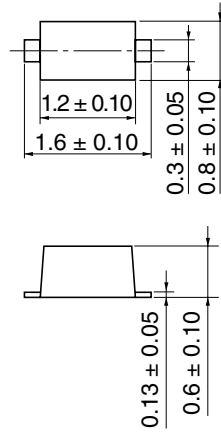


Fig.4 Linearity factor vs. Reverse voltage

Package Dimensions

As of January, 2003
Unit: mm



Package Code	UFP
JEDEC	—
JEITA	Conforms
Mass (reference value)	0.0016 g

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Dukes Meadow, Millboard Road, Bourne End, Buckinghamshire, SL8 5FH, United Kingdom
Tel: <44> (1628) 585 100, Fax: <44> (1628) 585 900

Renesas Technology Europe GmbH
Dornacher Str. 3, D-85622 Feldkirchen, Germany
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Renesas Technology (Shanghai) Co., Ltd.
26/F., Ruijin 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