

To our customers,

Old Company Name in Catalogs and Other Documents

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Renesas Electronics website: <http://www.renesas.com>

April 1st, 2010
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (<http://www.renesas.com>)

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Not recommended
for new design

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HVC397C

Variable Capacitance Diode for VCO

REJ03G0021-0100
(Previous: ADE-208-1561)
Rev.1.00
Apr.25.2003

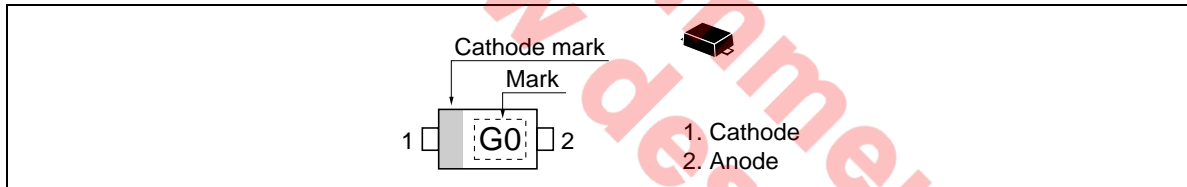
Features

- High capacitance ratio. ($n = 2.9$ min)
- Ultra small Flat Package (UFP) is suitable for surface mount design.

Ordering Information

Type No.	Laser Mark	Package Code
HVC397C	G0	UFP

Pin Arrangement



Absolute Maximum Ratings

(Ta = 25°C)

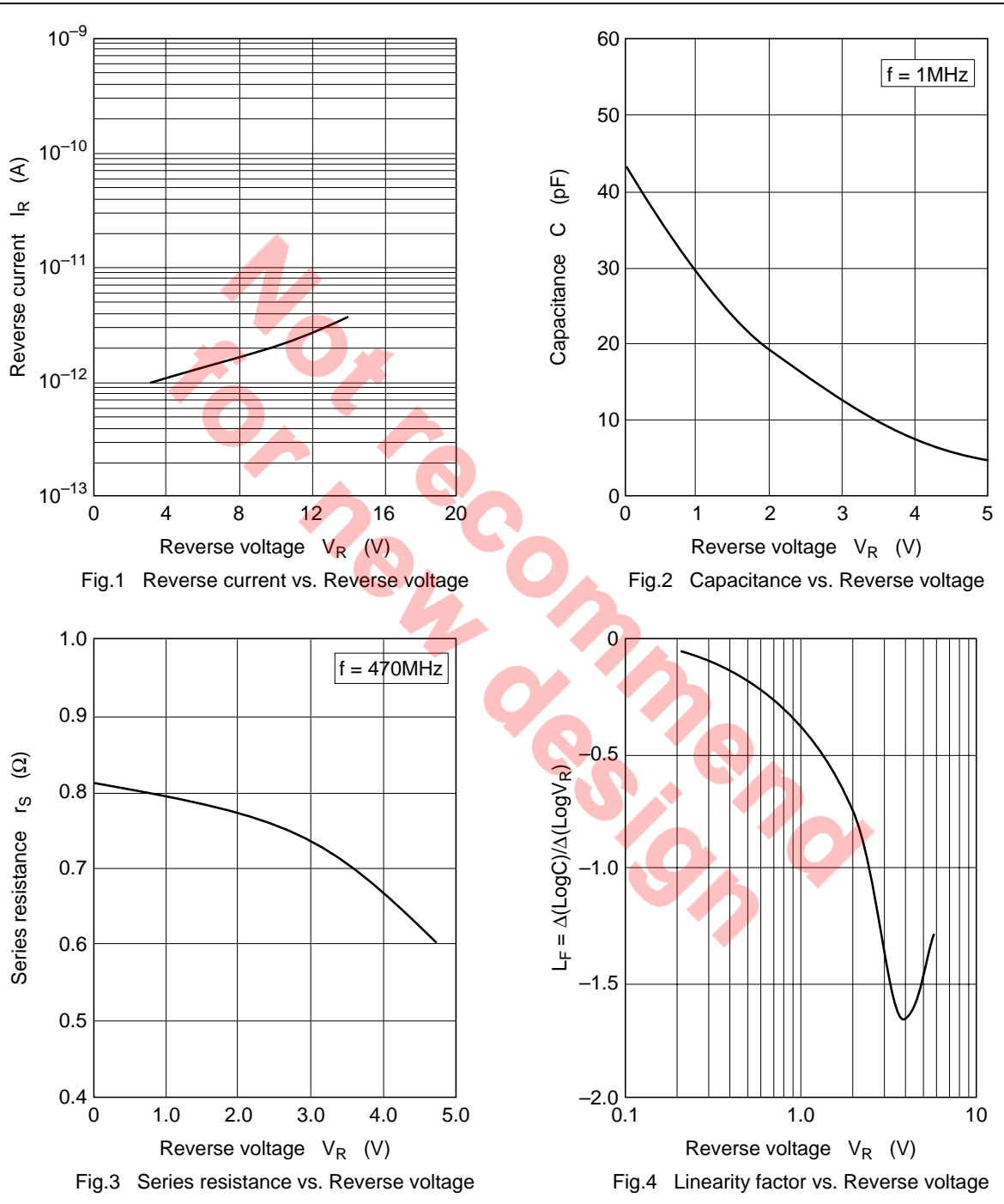
Item	Symbol	Value	Unit
Reverse voltage	V_R	15	V
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-55 to +125	°C

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}	—	—	50		$V_R = 10\text{ V}, T_a = 60^\circ\text{C}$
Capacitance	C_1	27.0	—	28.5	pF	$V_R = 1\text{ V}, f = 1\text{ MHz}$
	C_2	18.0	—	20.0		$V_R = 2\text{ V}, f = 1\text{ MHz}$
	C_4	6.8	—	8.5		$V_R = 4\text{ V}, f = 1\text{ MHz}$
Capacitance ratio	n_1	1.3	—	—	—	C_1 / C_2
	n_2	2.9	—	—	—	C_1 / C_4
Series resistance	r_s	—	—	1.2	Ω	$V_R = 1\text{ V}, f = 470\text{ MHz}$

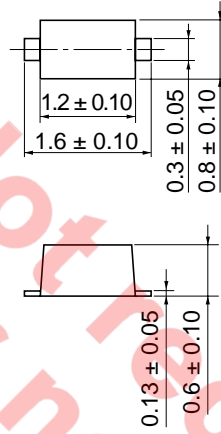
Main Characteristic



Package Dimensions

As of January, 2003

Unit: mm



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

Not for new design

Renesas Technology Corp. Sales Strategic Planning Div., Nippon Bldg., 2-6-2, Ohte-machi, Chiyoda-ku, Tokyo 100-0004, Japan

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