

HVC365

Variable Capacitance Diode for VCO

REJ03G0490-0300
 (Previous: ADE-208-428B)
 Rev.3.00
 Jan 17, 2005

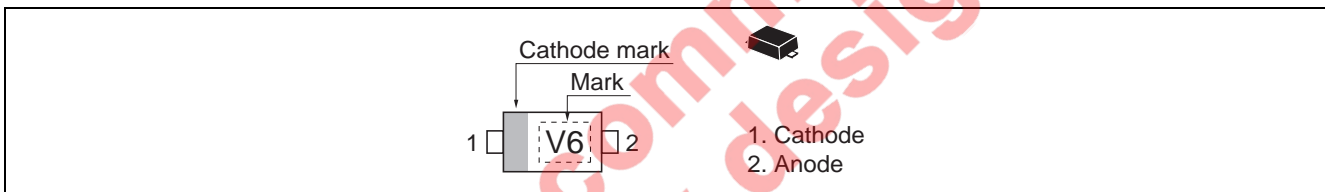
Features

- High capacitance ratio and good C-V linearity.
- Ultra small Flat Lead Package (UFP) is suitable for surface mount design.

Ordering Information

Type No.	Laser Mark	Package Code
HVC365	V6	UFP

Pin Arrangement



Not recommended for new design

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	27.05	—	28.55	pF	$V_R = 1\text{ V}, f = 1\text{ MHz}$
	C_4	6.05	—	7.55		$V_R = 4\text{ V}, f = 1\text{ MHz}$
Capacitance ratio	n	3.0	—	—	—	C_1 / C_4
Series resistance	r_s	—	—	1.5	Ω	$V_R = 4\text{ V}, f = 100\text{ MHz}$
ESD-Capability *1	—	200	—	—	V	$C = 200\text{ pF}, R = 0\ \Omega$, Both forward and reverse direction 1 pulse.

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

Not recommended for new designs

Main Characteristic

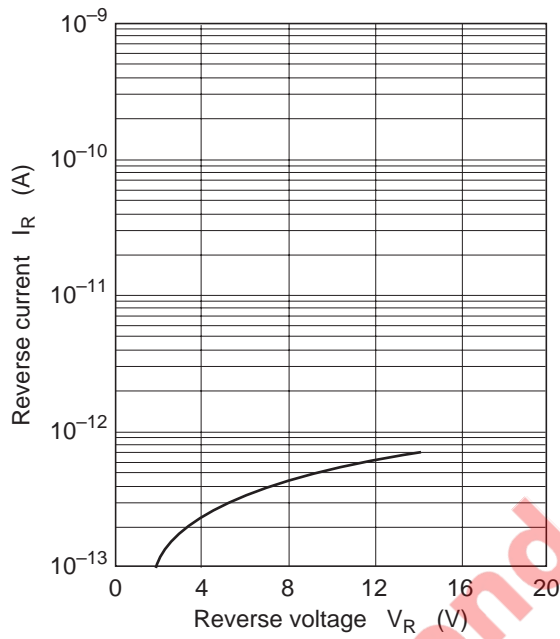


Fig.1 Reverse Current vs. Reverse Voltage

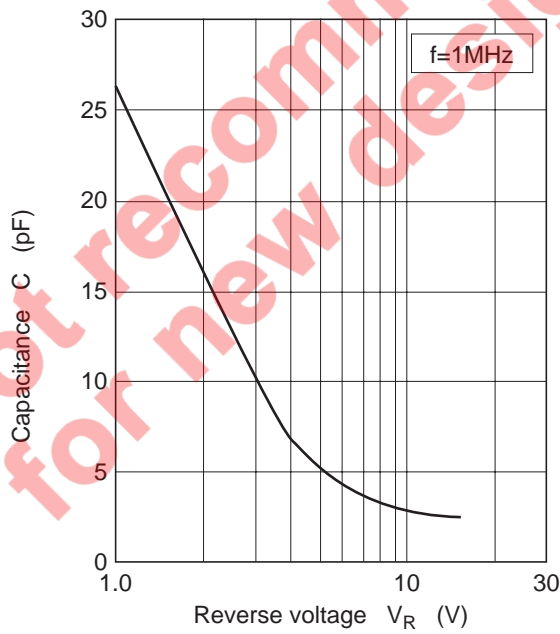
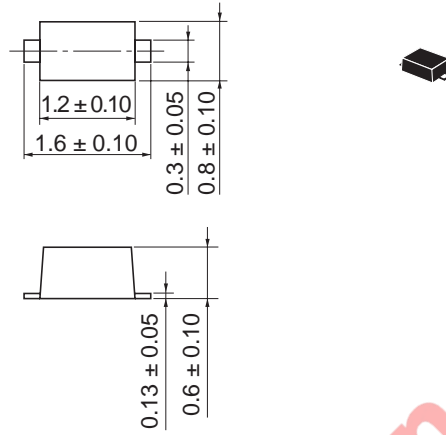


Fig.2 Capacitance vs. Reverse Voltage

Package Dimensions

As of January, 2003
Unit: mm



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

Not recommended
for new designs

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Unit2607 Ruijing Building, No.205 Maoming Road (S), Shanghai 200020, China
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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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