

# HVU362

## Variable Capacitance Diode for VCO

REJ03G0217-0100Z

Rev.1.00

Apr 16, 2004

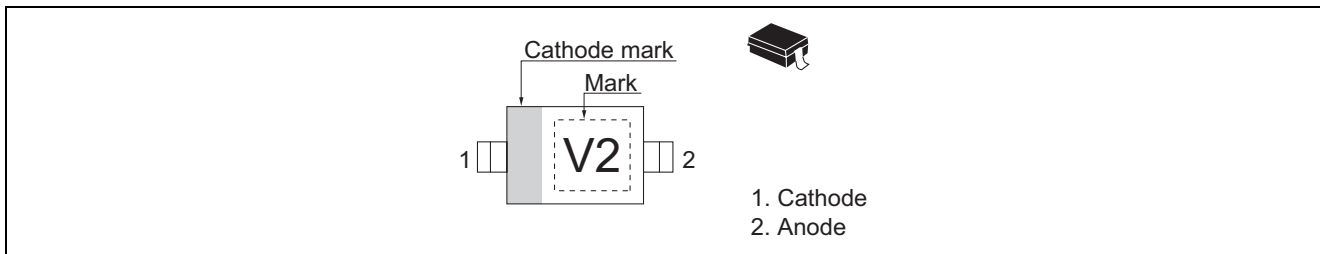
### Features

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

### Ordering Information

Type No.	Laser Mark	Package Code
HVU362	V2	URP

### Pin Arrangement



## Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V <sub>R</sub>	15	V
Junction temperature	T <sub>j</sub>	125	°C
Storage temperature	T <sub>stg</sub>	-55 to +125	°C

## Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse current	I <sub>R1</sub>	—	—	10	nA	V <sub>R</sub> = 10 V
	I <sub>R2</sub>	—	—	100		V <sub>R</sub> = 10 V, Ta = 60°C
Capacitance	C <sub>1</sub>	41.6	—	49.9	pF	V <sub>R</sub> = 1 V, f = 1 MHz
	C <sub>4</sub>	10.1	—	14.8		V <sub>R</sub> = 4 V, f = 1 MHz
Capacitance ratio	n	3.0	—	—	—	C <sub>1</sub> / C <sub>4</sub>
Series resistance	r <sub>s</sub>	—	—	2.0	Ω	V <sub>R</sub> = 4 V, f = 100 MHz
ESD-Capability *1	—	80	—	—	V	C = 200 pF, Both forward and reverse direction 1 pulse.

Note: 1. Failure criterion ; I<sub>R</sub> ≥ 20 nA at V<sub>R</sub> = 10 V

Main Characteristic

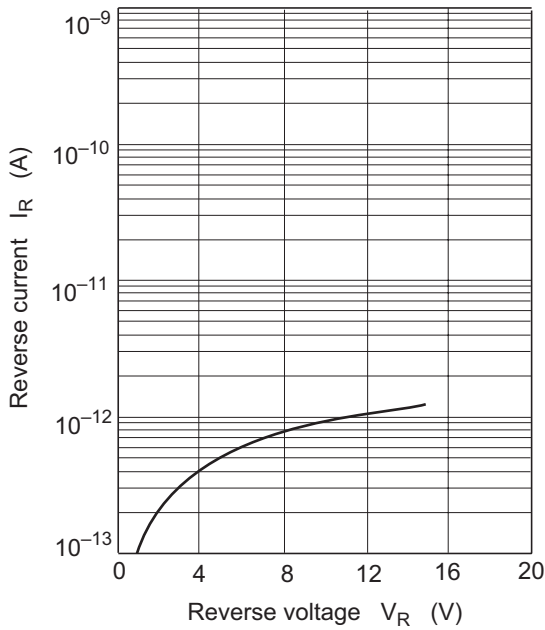


Fig.1 Reverse current vs. Reverse voltage

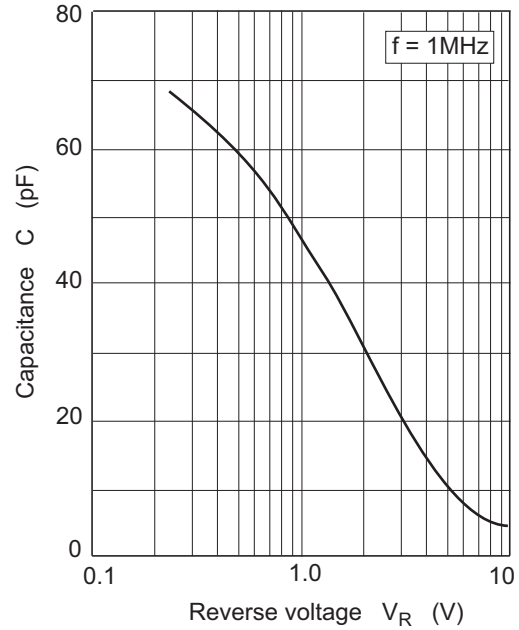


Fig.2 Capacitance vs. Reverse voltage

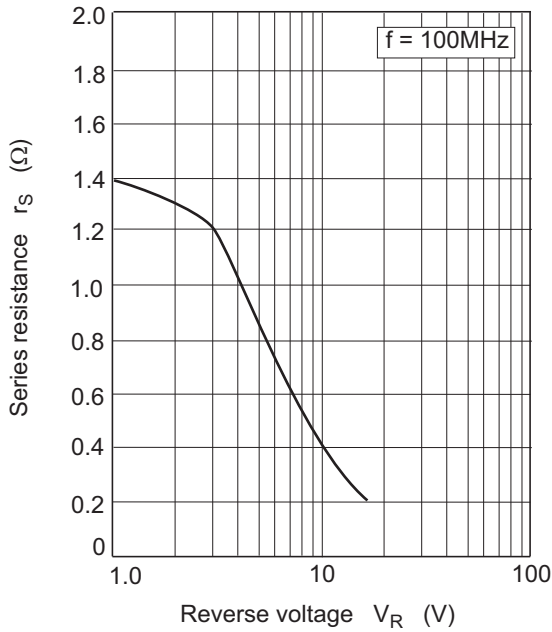


Fig.3 Series resistance vs. Reverse voltage

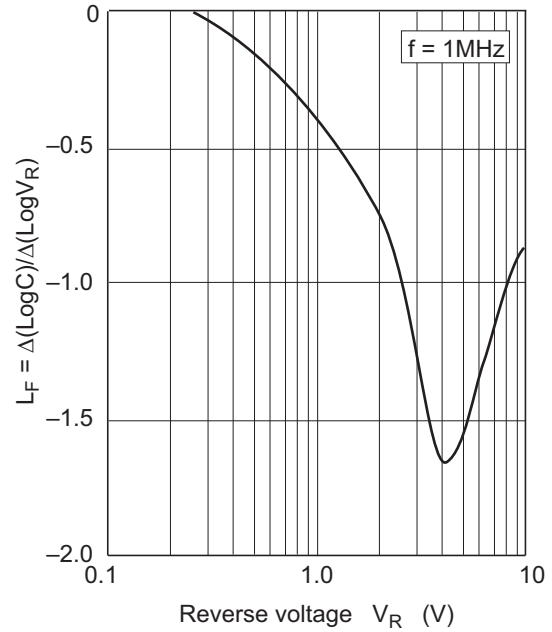
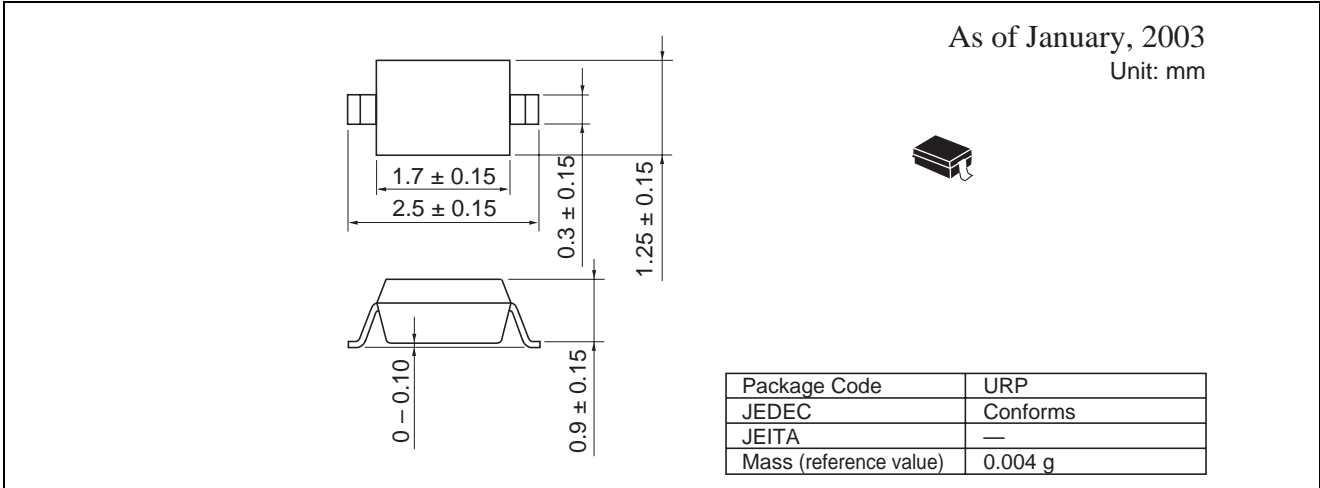


Fig.4 Linearity factor vs. Reverse voltage

Package Dimensions



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