HVU362

Variable Capacitance Diode for VCO

REJ03G0217-0100Z
Rev.1.00
Apr 16, 2004

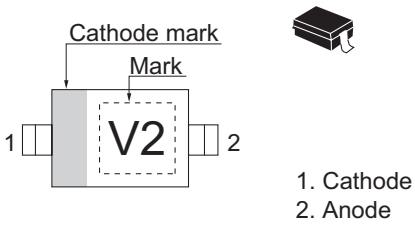
Features

- 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



1. Cathode
2. Anode

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V_R	15	V
Junction temperature	Tj	125	°C
Storage temperature	Tstg	–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	41.6	—	49.9	pF	V_R = 1 V, f = 1 MHz
	C_4	10.1	—	14.8		V_R = 4 V, f = 1 MHz
Capacitance ratio	n	3.0	—	—	—	C_1 / C_4
Series resistance	r_s	—	—	2.0	Ω	V_R = 4 V, f = 100 MHz
ESD-Capability *[1]	—	80	—	—	V	C = 200 pF, Both forward and reverse direction 1 pulse.

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

Main Characteristic

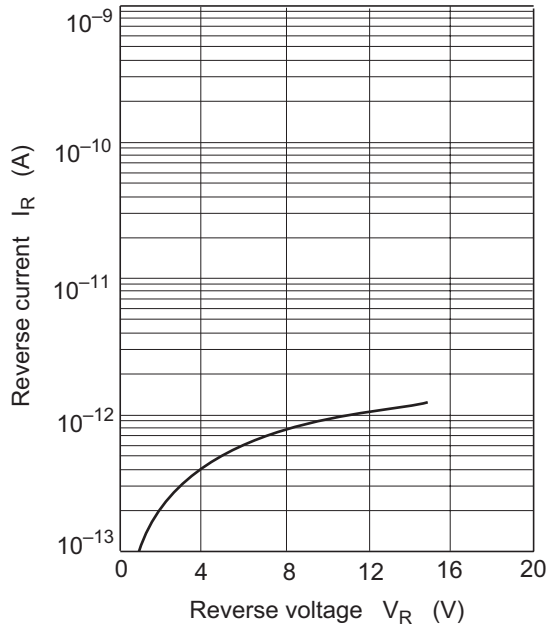


Fig.1 Reverse current vs. Reverse voltage

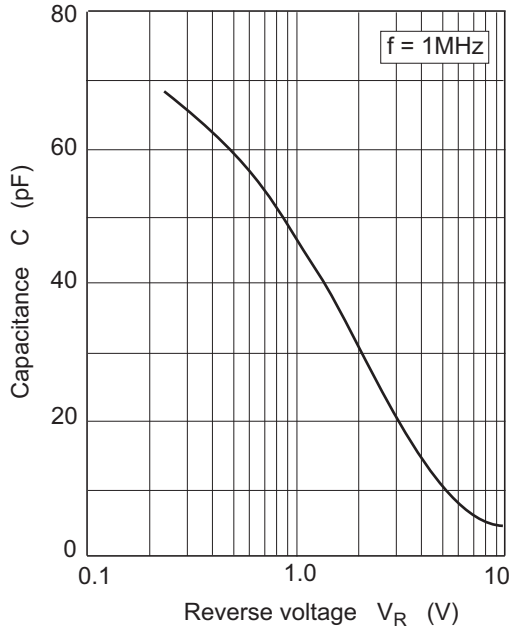


Fig.2 Capacitance vs. Reverse voltage

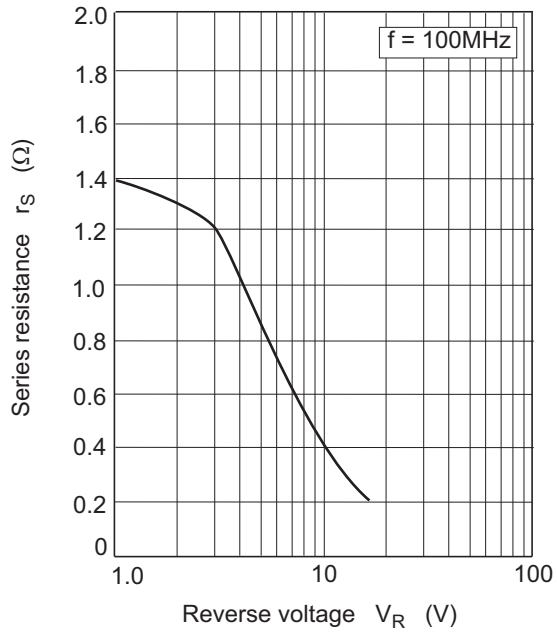


Fig.3 Series resistance vs. Reverse voltage

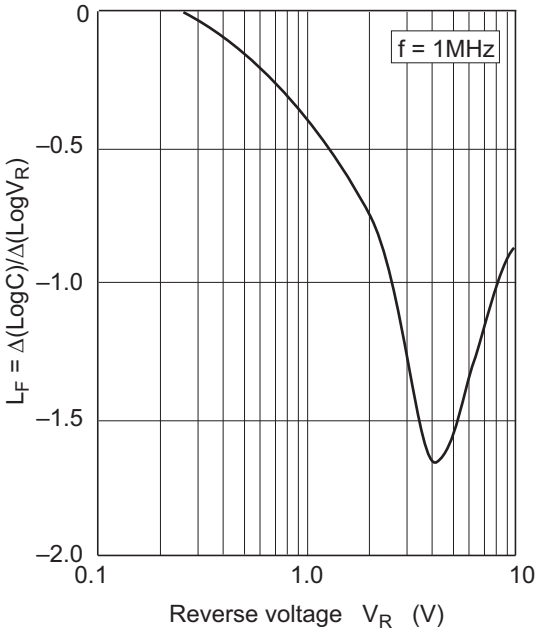
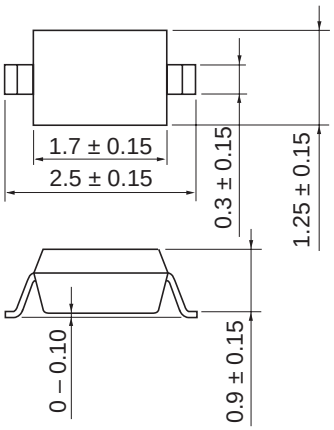


Fig.4 Linearity factor vs. Reverse voltage

Package Dimensions

As of January, 2003

Unit: mm



Package Code	URP
JEDEC	Conforms
JEITA	—
Mass (reference value)	0.004 g

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