

HVU362

Variable Capacitance Diode

VCXO

HITACHI

Rev. 0
May. 1995

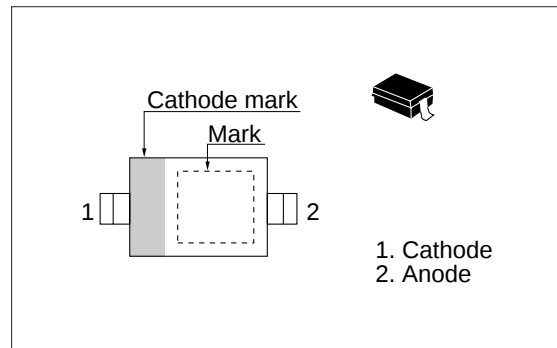
Features

- High capacitance ratio.(n=3.0min)
- 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

Outline



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 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	—	80	—	—	V	* C=200pF, Both forward and reverse direction 1 pulse.

* Failure criterion ; I_R ≥ 20nA at V_R = 10 V

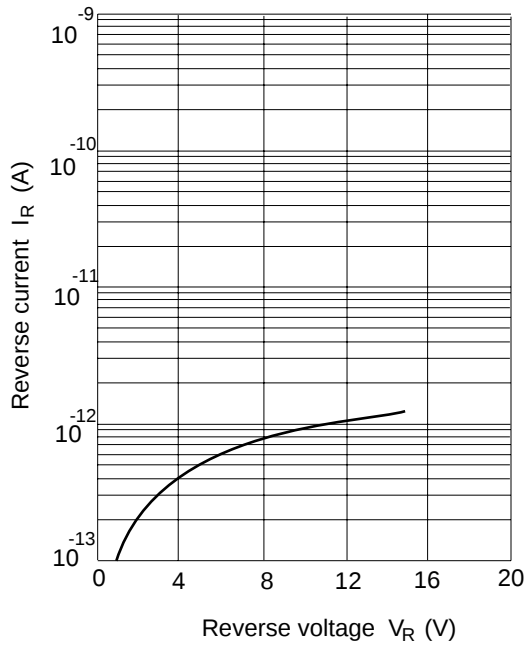


Fig.1 Reverse current Vs. Reverse voltage

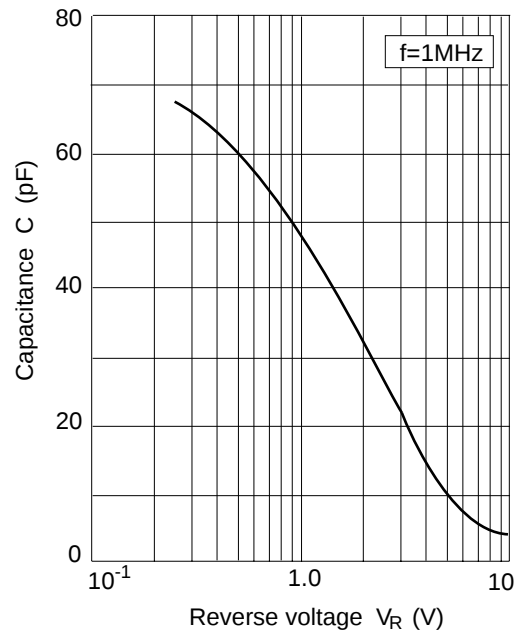


Fig.2 Capacitance Vs. Reverse voltage

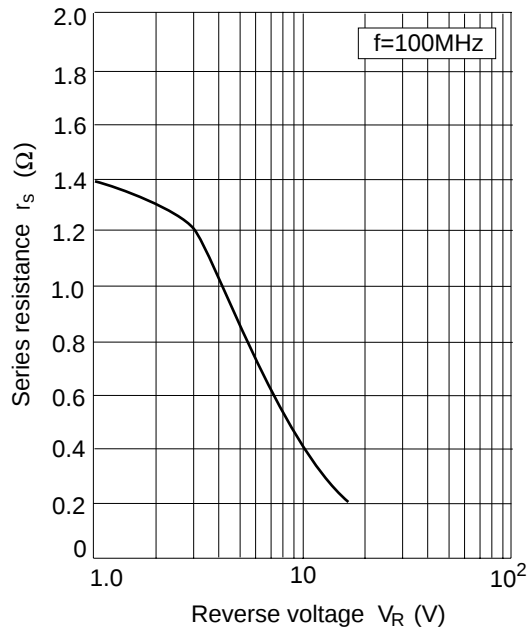


Fig.3 Series resistance Vs. Reverse voltage

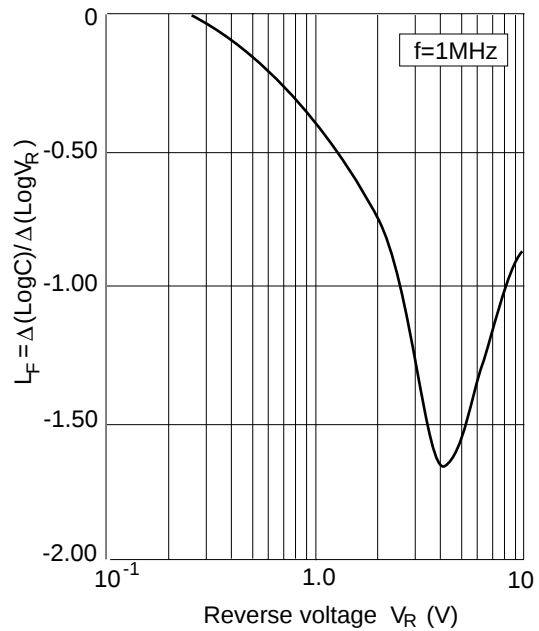
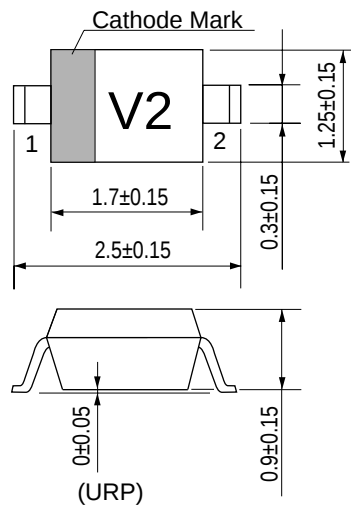


Fig.4 Linearity factor Vs. Reverse voltage

Package Dimensions

Unit: mm



- 1 Cathode
- 2 Anode

HITACHI Code	URP
JEDEC Code	—
EIAJ Code	—
Weight (g)	0.004