

HVU351

Variable Capacitance Diode for VCO

HITACHI

Rev. 4
May. 1995

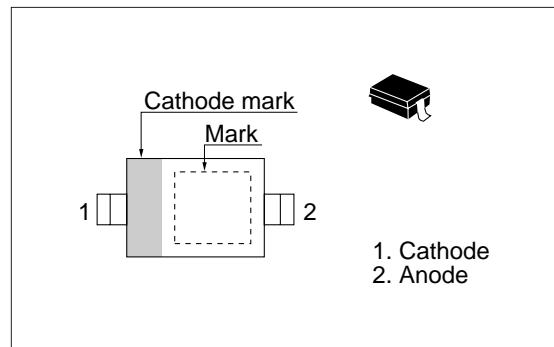
Features

- Low series resistance. ($r_s=0.35\Omega$ max)
- Ultra small Resin Package (URP) is suitable for surface mount design.

Ordering Information

Type No.	Laser Mark	Package Code
HVU351	6	URP

Outline

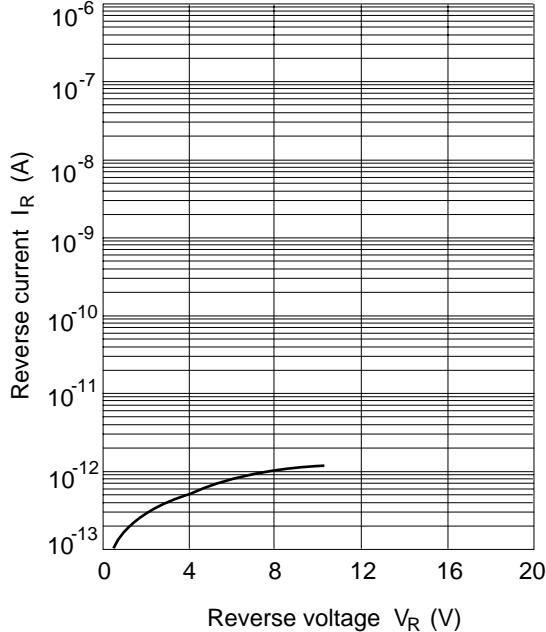


Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

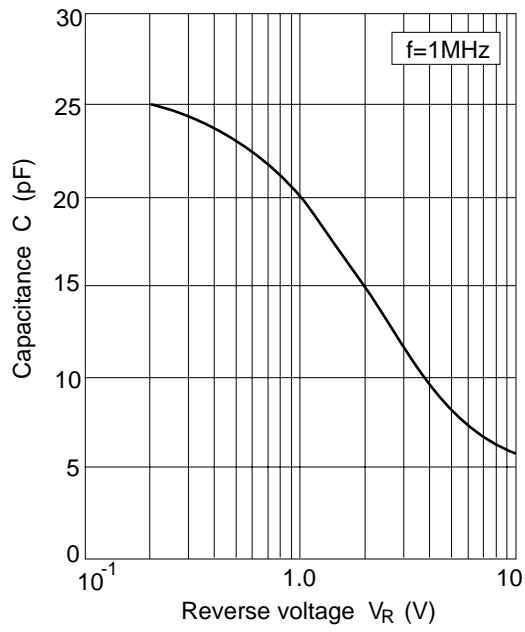
Item	Symbol	Value	Unit
Reverse voltage	V_R	10	V
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +125	$^\circ\text{C}$

Electrical Characteristics ($T_a = 25^\circ\text{C}$)

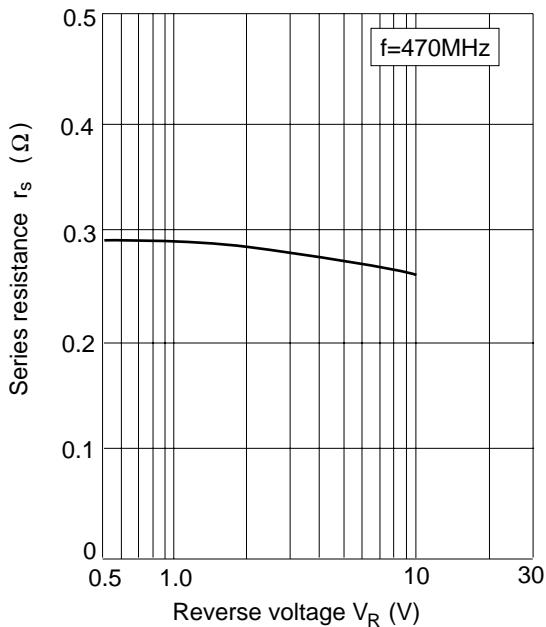
Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse current	I_{R1}	—	—	10	nA	$V_R = 10\text{ V}$
	I_{R2}	—	—	100		$V_R = 10\text{ V}, T_a = 60^\circ\text{C}$
Capacitance	C_2	14.0	—	16.0	pF	$V_R = 2\text{ V}, f = 1\text{ MHz}$
	C_{10}	5.0	—	6.5		$V_R = 10\text{ V}, f = 1\text{ MHz}$
Capacitance ratio	n	2.00	—	—		C_2 / C_{10}
Series resistance	r_s	—	—	0.35	Ω	$V_R = 1\text{ V}, f = 470\text{ MHz}$



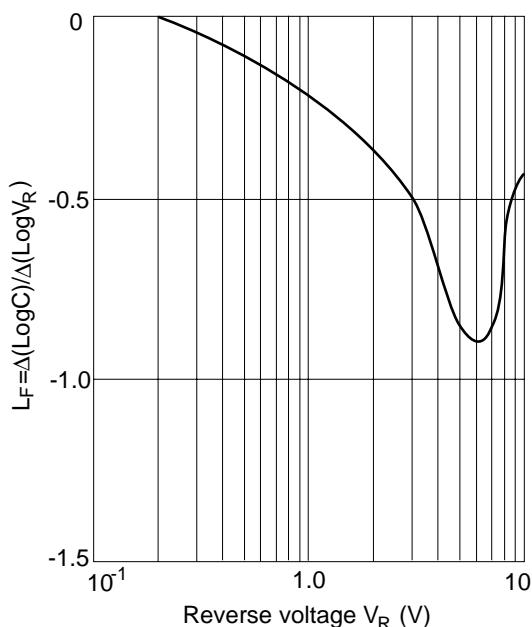
**Fig.1 Reverse current Vs.
Reverse voltage**



**Fig.2 Capacitance Vs.
Reverse voltage**



**Fig.3 Series resistance Vs.
Reverse voltage**



**Fig.4 Linearity factor Vs.
Reverse voltage**

Package Dimensions

Unit: mm

