

HVU356

Variable Capacitance Diode for VCO of Demodulator in BS tuner

HITACHI

Preliminary
Rev. 3
May. 1993

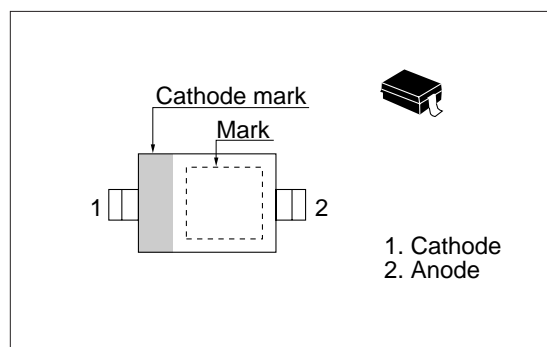
Features

- Low series resistance. ($r_s=0.6\Omega$ max)
- Ultra small Resin Package (URP) is suitable for surface mount design.

Ordering Information

Type No.	Laser Mark	Package Code
HVU356	L	URP

Outline



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

Item	Symbol	Value	Unit
Reverse voltage	V_R	15	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_R	—	—	10	nA	$V_R = 15\text{ V}$
	C_2	27.7	—	31.8		$V_R = 2\text{ V}, f = 1\text{ MHz}$
Capacitance	C_3	21.6	—	25.6	pF	$V_R = 3\text{ V}, f = 1\text{ MHz}$
	C_4	17.1	—	21.2		$V_R = 4\text{ V}, f = 1\text{ MHz}$
Capacitance ratio	n	1.45	—	—	—	C_2 / C_4
Series resistance	r_s	—	—	0.60	Ω	$V_R = 5\text{ V}, f = 470\text{ MHz}$

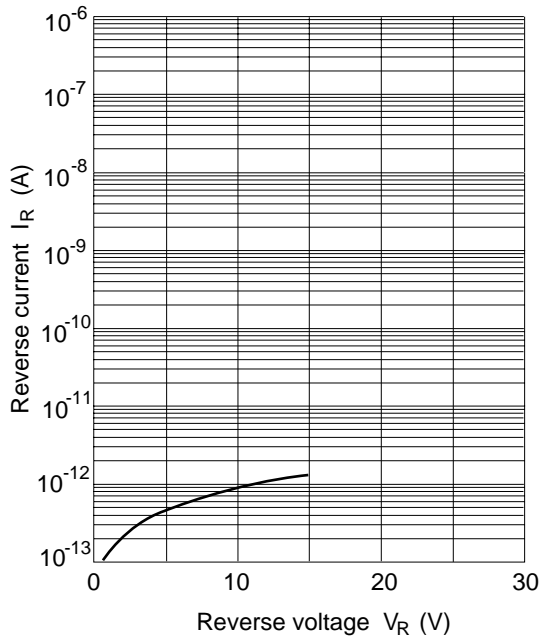


Fig.1 Reverse current Vs. Reverse voltage

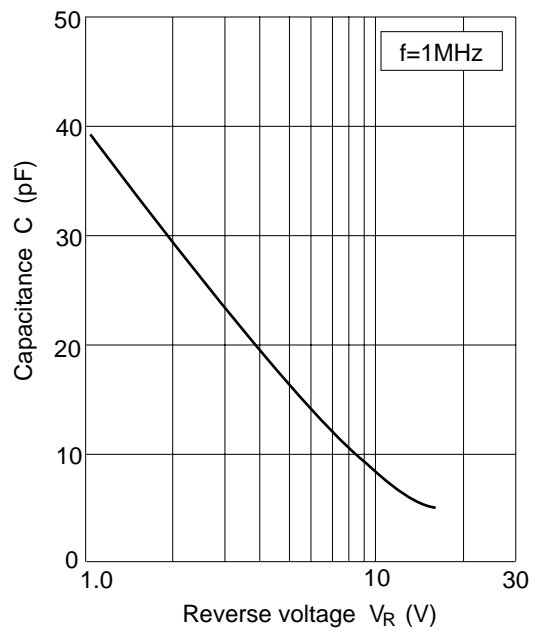


Fig.2 Capacitance Vs. Reverse voltage

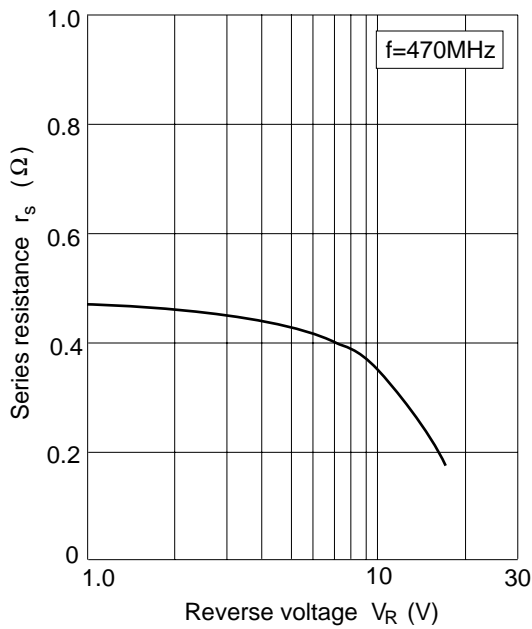


Fig.3 Series resistance Vs. Reverse voltage

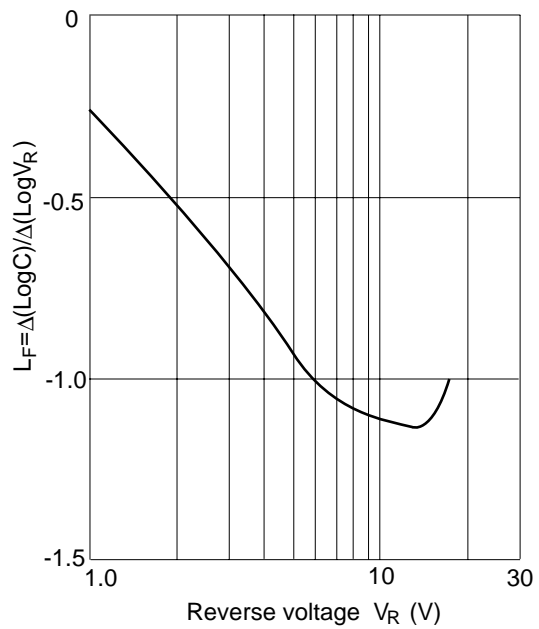


Fig.4 Linearity factor Vs. Reverse voltage

Package Dimensions

Unit: mm

