

# HVU308A

## Variable Capacitance Diode for TV tuner

# HITACHI

Preliminary  
Rev. 1  
Apr. 1993

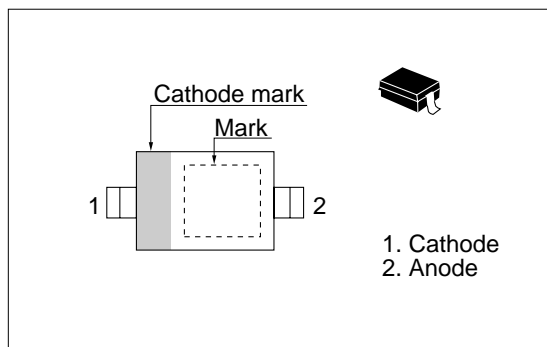
### Features

- Low series resistance. ( $r_s=0.95\Omega$  max)
- Ultra small Resin Package (URP) is suitable for surface mount design.

### Ordering Information

Type No.	Laser Mark	Package Code
HVU308A	V	URP

### Outline



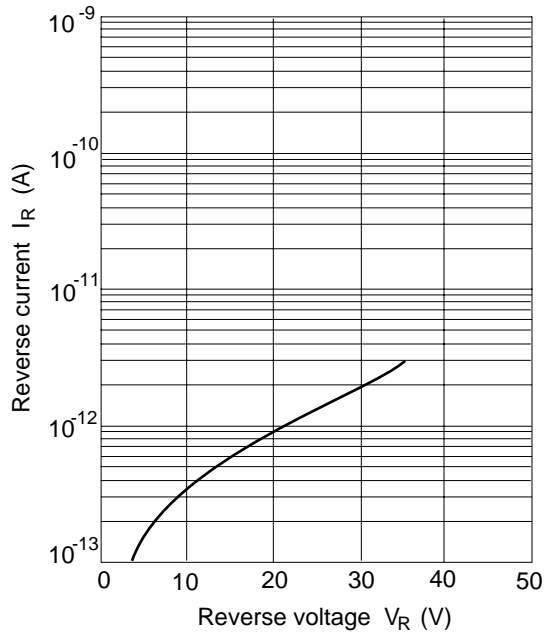
### Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	$V_R$	35	V
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	-55 to +125	°C

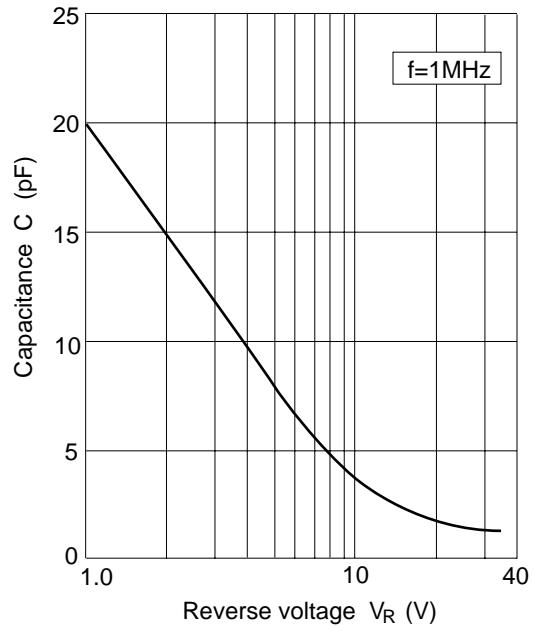
### Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse current	$I_{R1}$	—	—	10	nA	$V_R = 30$ V
	$I_{R2}$	—	—	100		$V_R = 30$ V, $T_a = 60$ °C
Capacitance	$C_2$	13.7	—	15.9	pF	$V_R = 2$ V, $f = 1$ MHz
	$C_{20}$	1.65	—	2.06		$V_R = 20$ V, $f = 1$ MHz
Capacitance ratio	n	7.12	—	—	—	$C_2 / C_{20}$
Series resistance	$r_s$	—	—	0.95	$\Omega$	$V_R = 5$ V, $f = 470$ MHz

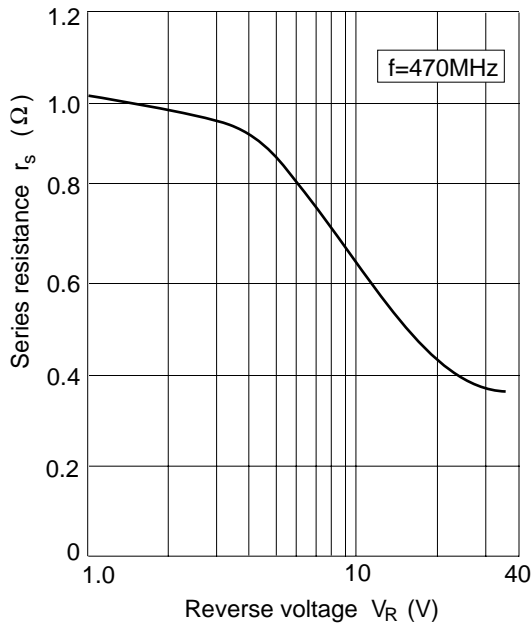
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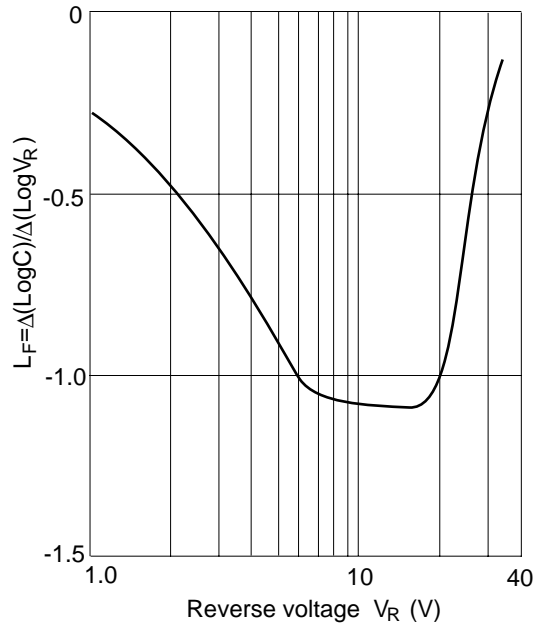
**Fig.1 Reverse current Vs. Reverse voltage**



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



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



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

### Package Dimensions

Unit: mm

