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# HVU308A

Variable Capacitance Diode for TV tuner

# HITACHI

ADE-208-020B (Z)

Rev 2

Nov. 1998

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## Features

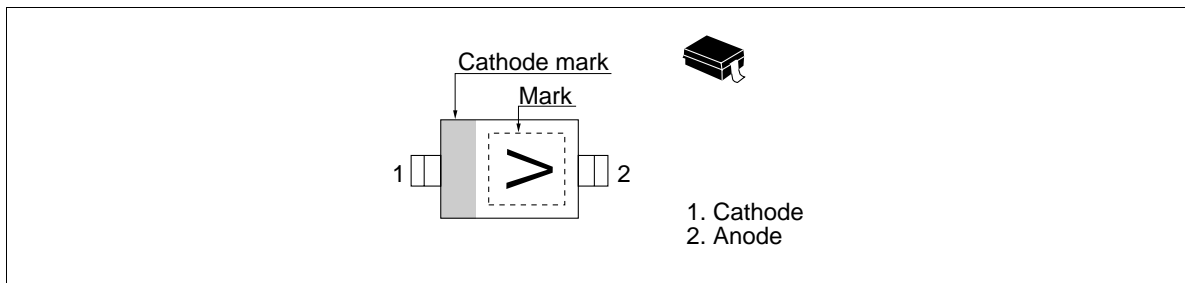
- Low series resistance. ( $r_s=0.95\Omega_{\text{max}}$ )
- Ultra small Resin Package (URP) is suitable for surface mount design.

## Ordering Information

Type No.	Laser Mark	Package Code
HVU308A	V	URP

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## Outline



## HVU308A

### 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	$V_R = 30V$
	$I_{R2}$	—	—	100		$V_R = 30V, T_a = 60°C$
Capacitance	$C_2$	13.7	—	15.9	pF	$V_R = 2V, f = 1MHz$
	$C_{20}$	1.65	—	2.06		$V_R = 20V, f = 1MHz$
Capacitance ratio	n	7.12	—	—	—	$C_2/C_{20}$
Series resistance	$r_s$	—	—	0.95	$\Omega$	$V_R = 5V, f = 470MHz$

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# Main Characteristic

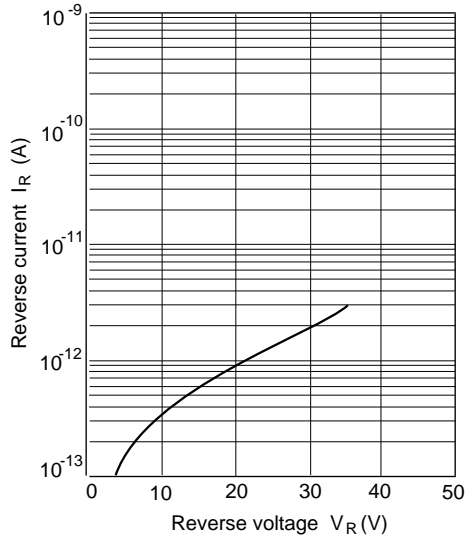


Fig.1 Reverse current Vs. Reverse voltage

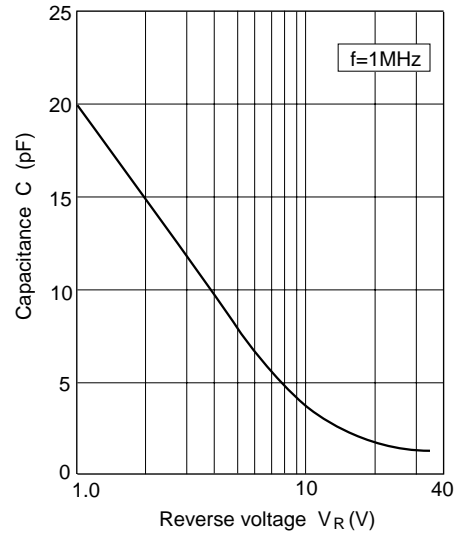


Fig.2 Capacitance Vs. Reverse voltage

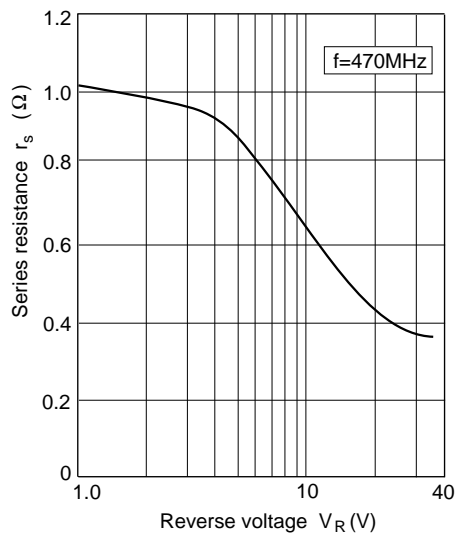


Fig.3 Series resistance Vs. Reverse voltage

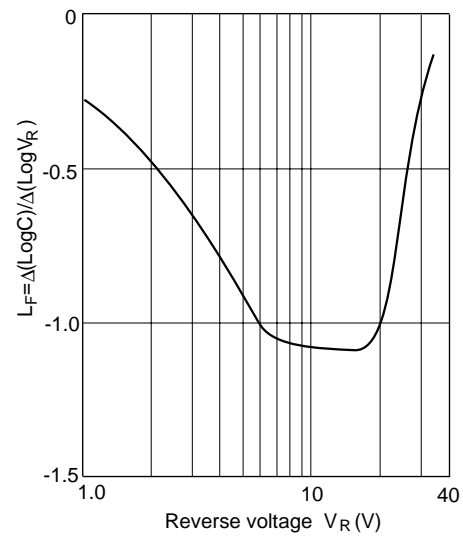
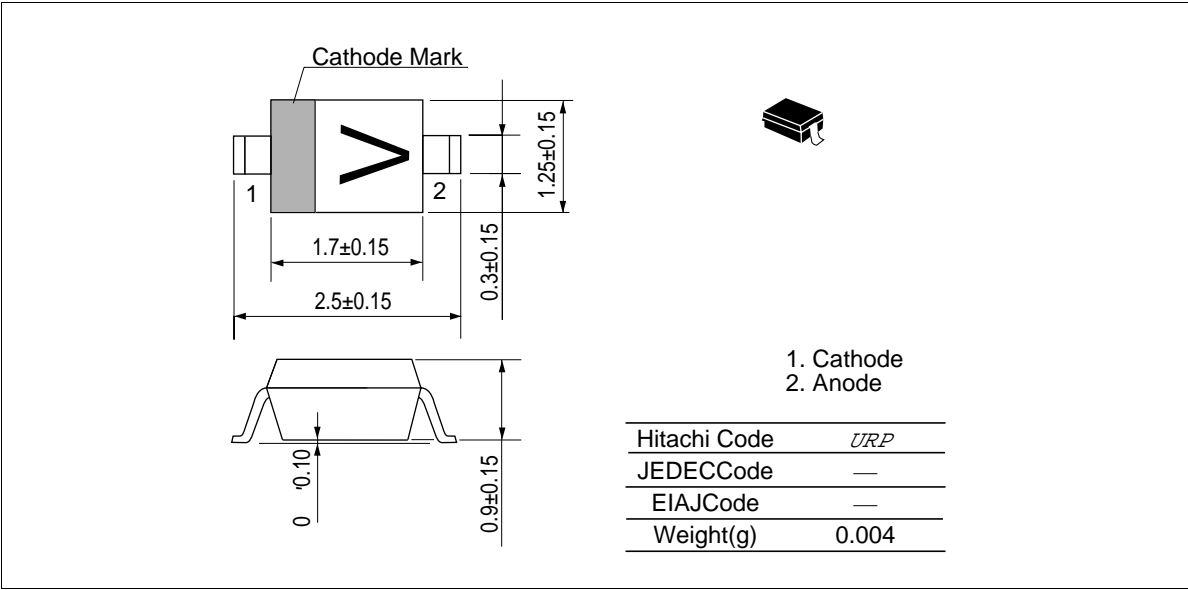


Fig.4 Linearity factor Vs. Reverse voltage

**HVU308A**

**Package Dimensions**

**Unit : mm**



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