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# HVU202A

Variable Capacitance Diode for Electronic Tuning

# HITACHI

ADE-208-034D(Z)

Rev 4

June 1996

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## Features

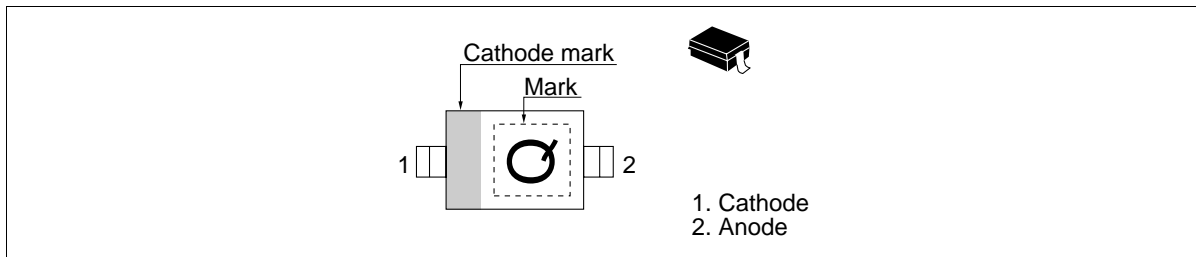
- Low series resistance and good C-V linearity.
- Suitable for compact ET tuner.
- Ultra small Resin Package (URP) is suitable for surface mount design.

## Ordering Information

Type No.	Laser Mark	Package Code
HVU202A	Q	URP

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## Outline



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## HVU202A

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

Item	Symbol	Value	Unit
Reverse voltage	VR	34	V
Junction temperature	Tj	125	°C
Storage temperature	Tstg	-55~+125	°C

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

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse current	IR1	∅	∅	10	nA	VR = 32V
	IR2	∅	∅	100		VR = 32V, Ta = 60 °C
Capacitance	C2	14.11	∅	16.47	pF	VR = 2V, f = 1 MHz
	C25	2.06	∅	2.35		VR = 25V, f = 1 MHz
Capacitance ratio	n	6.2	∅	∅	∅	C2/ C25
Series resistance	rs	∅	∅	0.57	Ω	VR = 5V, f = 470 MHz
Matching error	ΔC/C*1	∅	∅	2.0	%	VR = 2~25V, f = 1 MHz

Note 1. C.C system (Continuous Connected taping system) enable to make any 10 pcs of ΔC/C continuous in a reel , expect extention to another group.  
Calculate Matching Error,

(Cmax-Cmin)

$$\Delta C/C = \frac{\text{Cmax-Cmin}}{\text{Cmin}} \times 100 (\%)$$

Main Characteristic

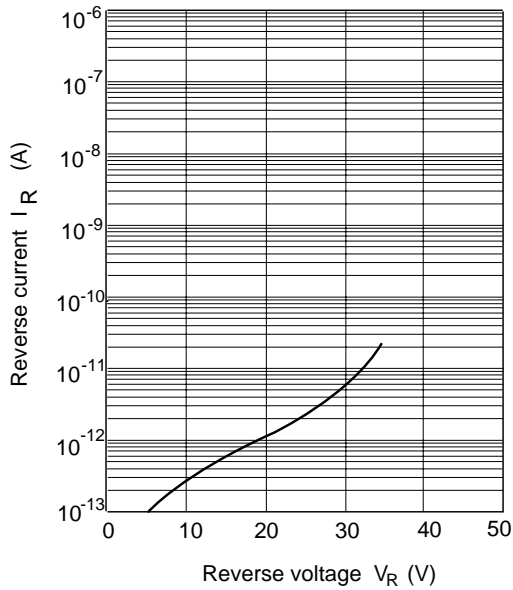


Fig.1 Reverse current Vs. Reverse voltage

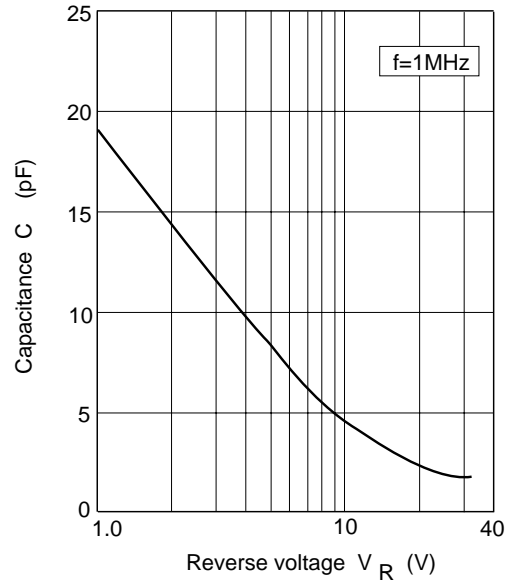


Fig.2 Capacitance Vs. Reverse voltage

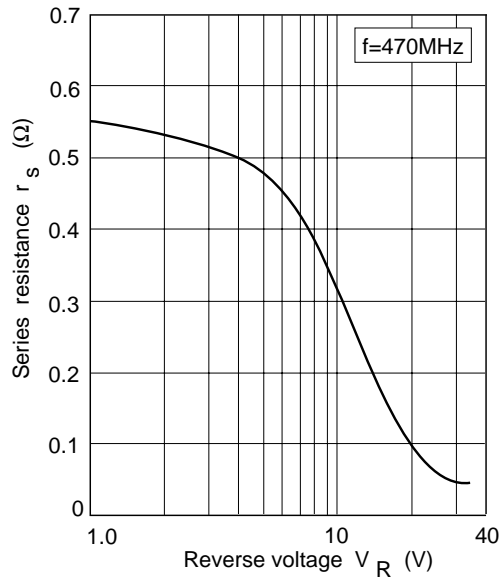


Fig.3 Series resistance Vs. Reverse voltage

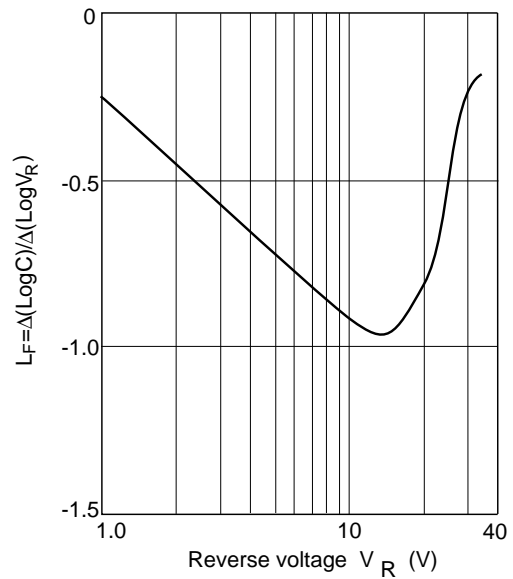


Fig.4 Linearity factor Vs. Reverse voltage

# HVU202A

## Package Dimensions

Unit : mm

