

# HVU326C

## Variable Capacitance Diode for UHF/VHF tuner

REJ03G0214-0100Z

Rev.1.00

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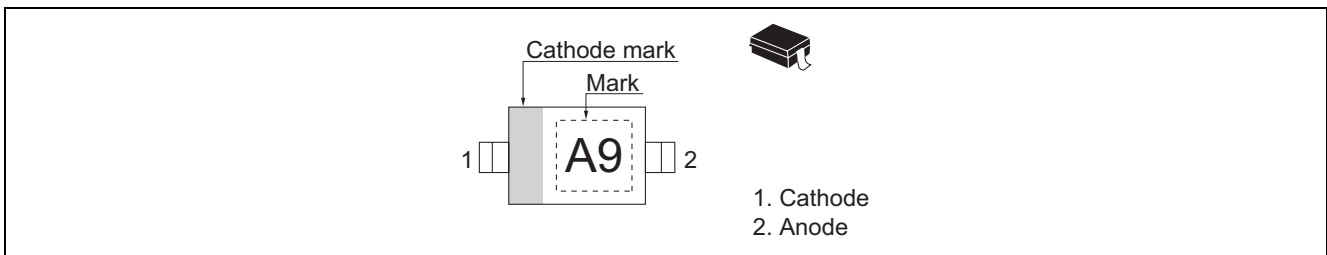
### Features

- Low voltage type (tuning voltage 1 to 10 V), it is suitable for ET without DC/DC converter.
- Low series resistance. ( $r_s = 0.6 \Omega$  max) and good C-V linearity.
- Ultra small Resin Package (URP) is suitable for surface mount design.

### Ordering Information

Type No.	Laser Mark	Package Code
HVU326C	A9	URP

### Pin Arrangement



## Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V <sub>R</sub>	15	V
Junction temperature	T <sub>j</sub>	125	°C
Storage temperature	T <sub>stg</sub>	-55 to +125	°C

## Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse current	I <sub>R1</sub>	—	—	10	nA	V <sub>R</sub> = 10 V
	I <sub>R2</sub>	—	—	100		V <sub>R</sub> = 10 V, Ta = 60°C
Capacitance	C <sub>1</sub>	13.0	—	16.0	pF	V <sub>R</sub> = 1 V, f = 1 MHz
	C <sub>10</sub>	2.0	—	2.3		V <sub>R</sub> = 10 V, f = 1 MHz
Capacitance ratio	n	6.0	—	—	—	C <sub>1</sub> / C <sub>10</sub>
Series resistance	r <sub>s</sub>	—	—	0.6	Ω	V <sub>R</sub> = 5 V, f = 470 MHz
Matching error	ΔC/C *1	—	—	2.0	%	V <sub>R</sub> = 1 to 10 V, 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,

$$\Delta C/C = \frac{(C_{max} - C_{min})}{C_{min}} \times 100 (\%)$$

Main Characteristic

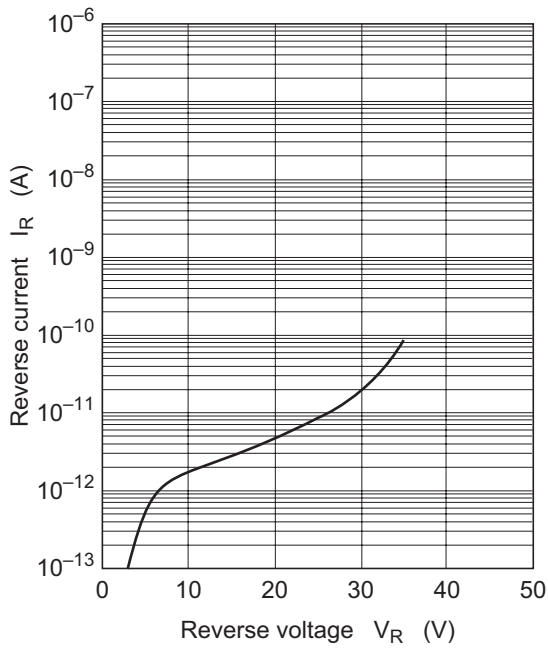


Fig.1 Reverse current vs. Reverse voltage

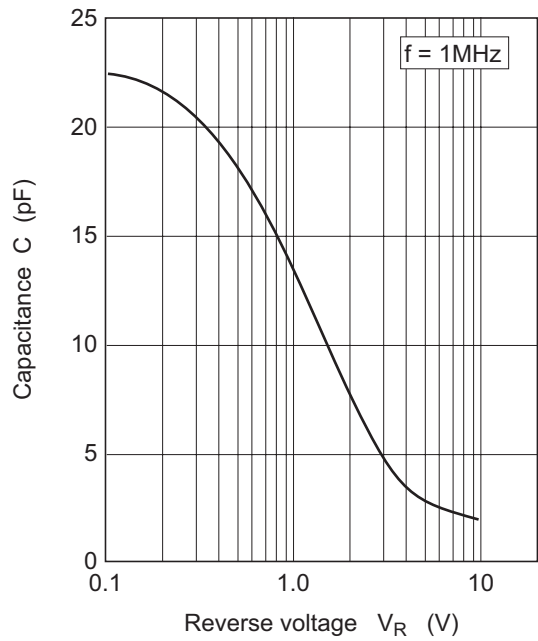


Fig.2 Capacitance vs. Reverse voltage

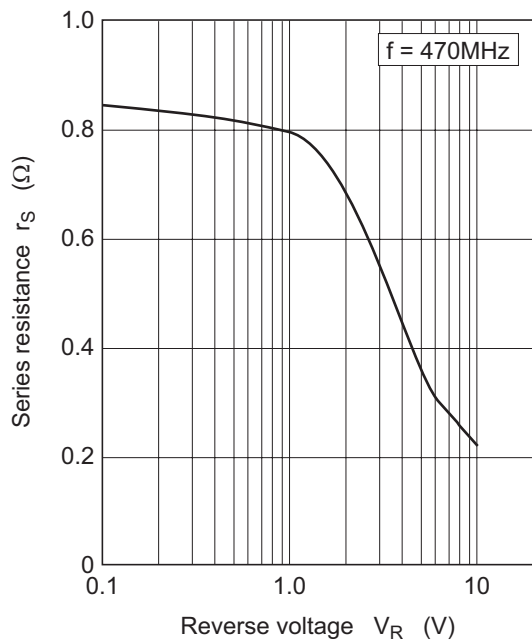


Fig.3 Series resistance vs. Reverse voltage

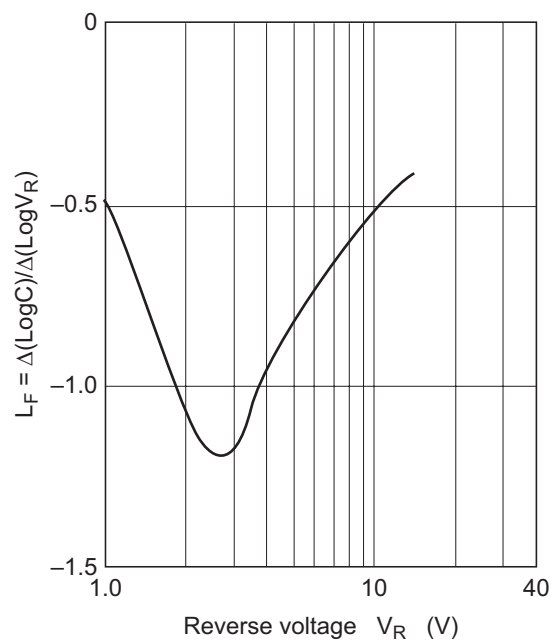
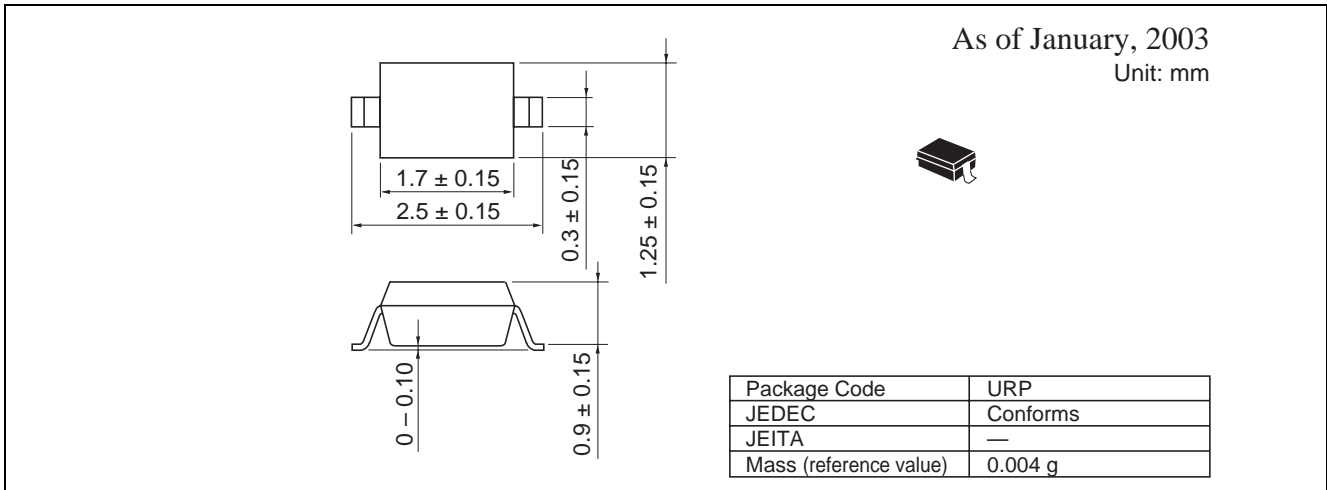


Fig.4 Linearity factor vs. Reverse voltage

Package Dimensions



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