

# HVU133

## Silicon Epitaxial Planar Pin Diode for Antenna Switching

REJ03G0436-0300  
(Previous: ADE-208-377B)  
Rev.3.00  
Oct 29, 2004

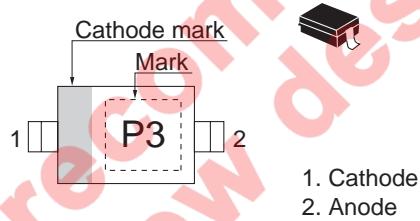
### Features

- Low capacitance. ( $C_1 = 1.0 \text{ pF}$  max)
- Low forward resistance. ( $r_f = 0.7 \Omega$  max)
- Ultra small Resin Package (URP) is suitable for surface mount design.

### Ordering Information

Type No.	Laser Mark	Package Code
HVU133	P3	URP

### Pin Arrangement



**Absolute Maximum Ratings**

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V <sub>R</sub>	30	V
Power dissipation	P <sub>d</sub>	150	mW
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 voltage	V <sub>R</sub>	30	—	—	V	I <sub>R</sub> = 1 μA
Reverse current	I <sub>R</sub>	—	—	100	nA	V <sub>R</sub> = 25 V
Forward voltage	V <sub>F</sub>	—	—	0.85	V	I <sub>F</sub> = 2 mA
Capacitance	C <sub>1</sub>	—	—	1.00	pF	V <sub>R</sub> = 1 V, f = 1 MHz
	C <sub>6</sub>	—	—	0.90		V <sub>R</sub> = 6 V, f = 1 MHz
Forward resistance	r <sub>f</sub>	—	0.55	0.70	Ω	I <sub>F</sub> = 2 mA, f = 100 MHz

## Main Characteristic

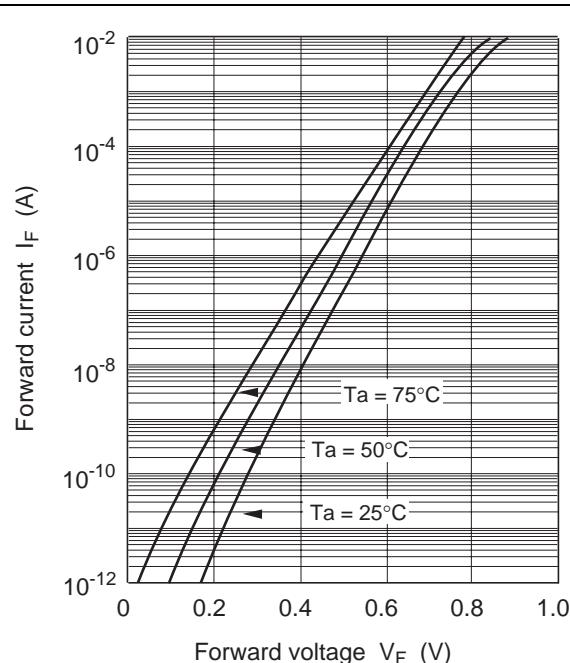


Fig.1 Forward current vs. Forward voltage

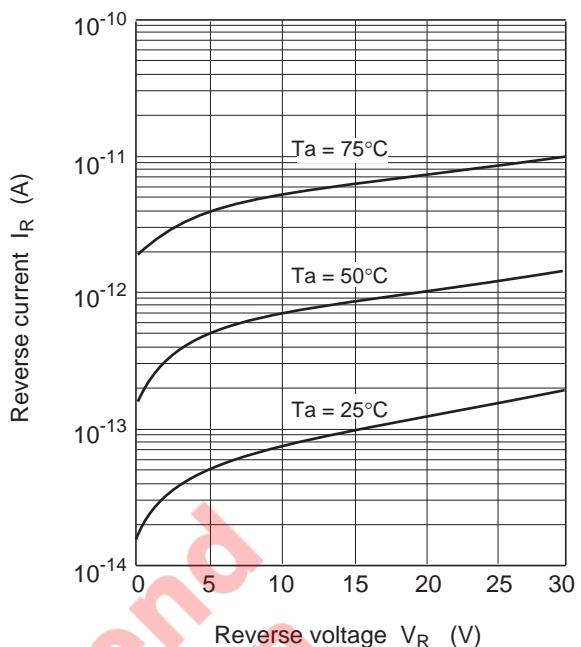


Fig.2 Reverse current vs. Reverse voltage

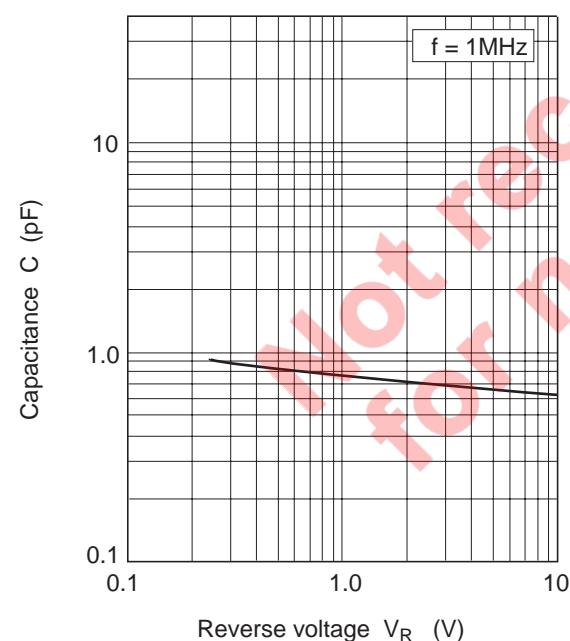


Fig.3 Capacitance vs. Reverse voltage

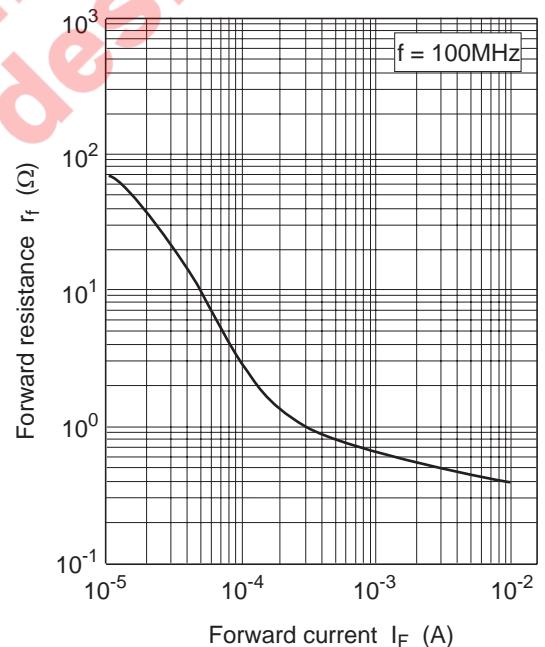
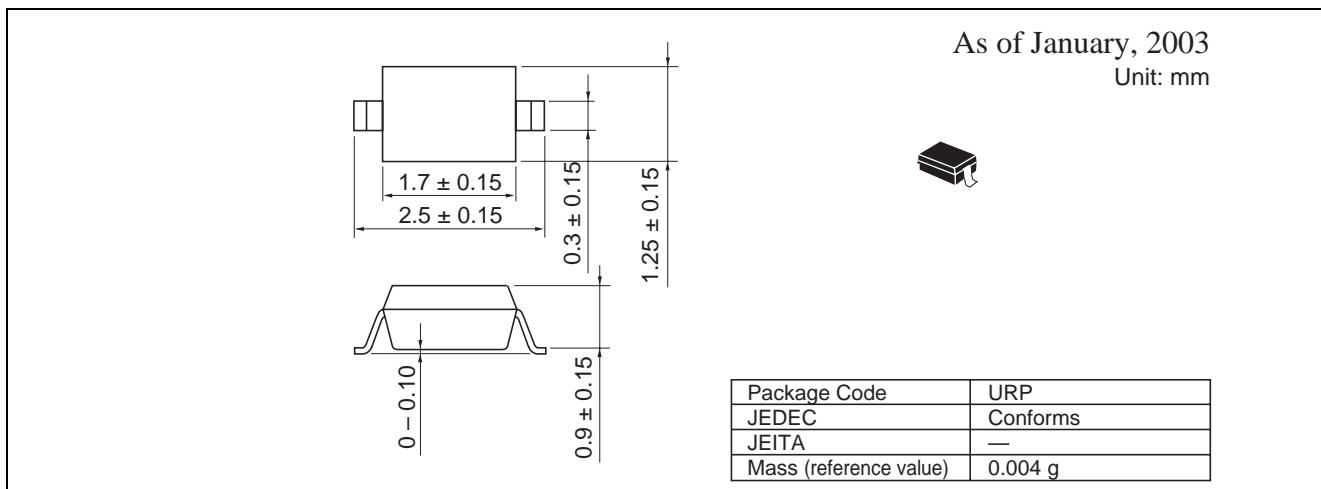


Fig.4 Forward resistance vs. Forward current

## Package Dimensions



Not recommend  
for new design

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