

# HVU133

## Silicon Epitaxial Planar Pin Diode for Antenna Switching

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

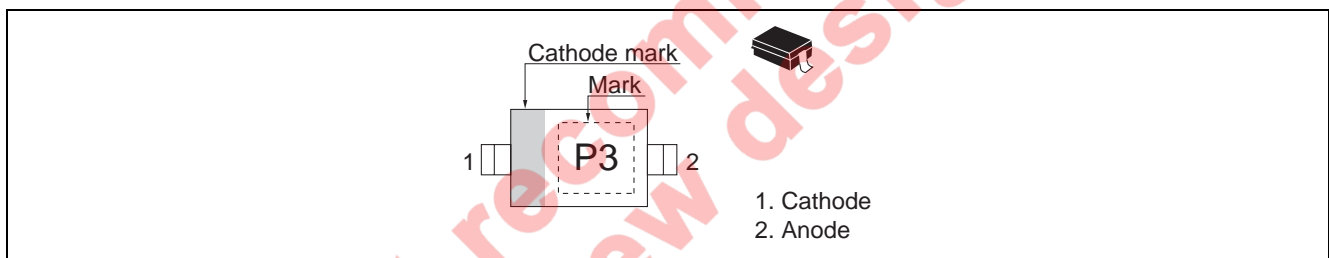
### Features

- Low capacitance. ( $C1 = 1.0 \text{ pF max}$ )
- Low forward resistance. ( $r_f = 0.7 \Omega \text{ max}$ )
- 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	$V_R$	30	V
Power dissipation	$P_d$	150	mW
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 voltage	$V_R$	30	—	—	V	$I_R = 1\mu A$
Reverse current	$I_R$	—	—	100	nA	$V_R = 25\text{ V}$
Forward voltage	$V_F$	—	—	0.85	V	$I_F = 2\text{ mA}$
Capacitance	$C_1$	—	—	1.00	pF	$V_R = 1\text{ V}, f = 1\text{ MHz}$
	$C_6$	—	—	0.90		$V_R = 6\text{ V}, f = 1\text{ MHz}$
Forward resistance	$r_f$	—	0.55	0.70	$\Omega$	$I_F = 2\text{ mA}, f = 100\text{ MHz}$

Not recommended  
for new design

## Main Characteristic

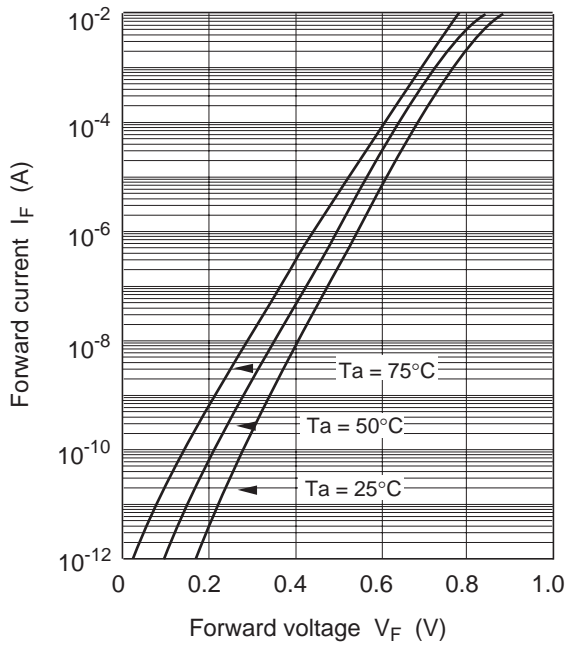


Fig.1 Forward current vs. Forward voltage

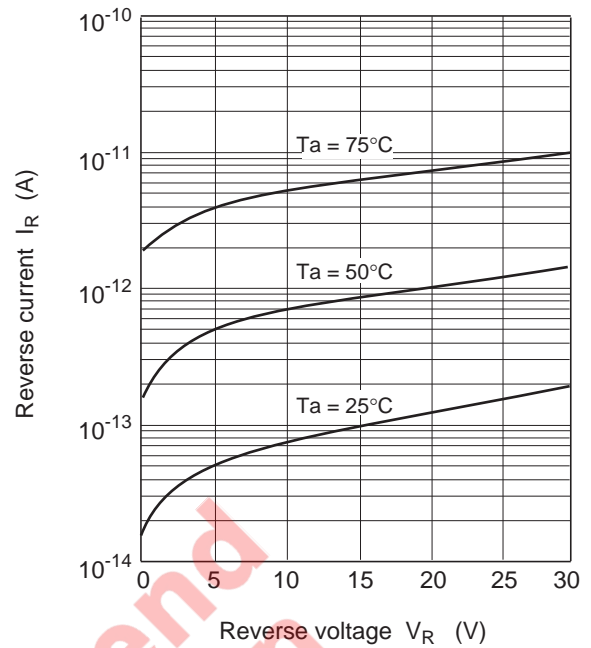


Fig.2 Reverse current vs. Reverse voltage

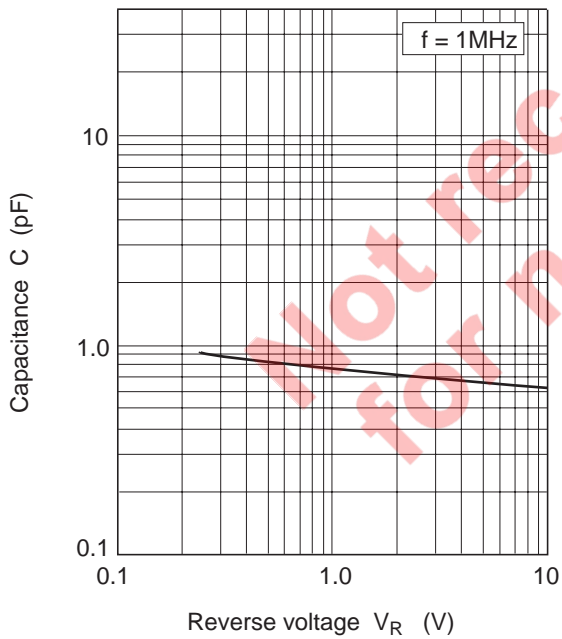


Fig.3 Capacitance vs. Reverse voltage

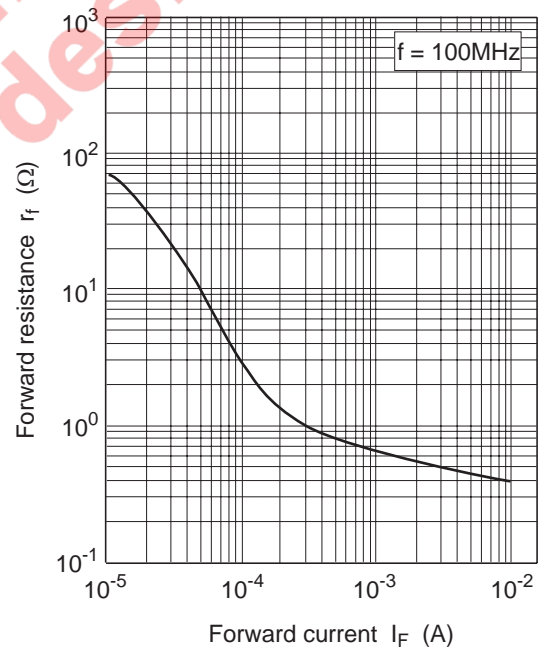
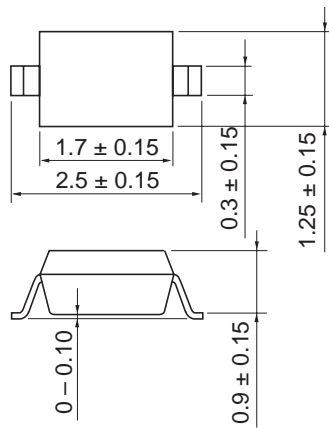


Fig.4 Forward resistance vs. Forward current

# Package Dimensions

As of January, 2003  
Unit: mm



Package Code	URP
JEDEC	Conforms
JEITA	—
Mass (reference value)	0.004 g

Not recommend  
for new design

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