

HVU133

Silicon Epitaxial Planar Pin Diode for Antenna Switching

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

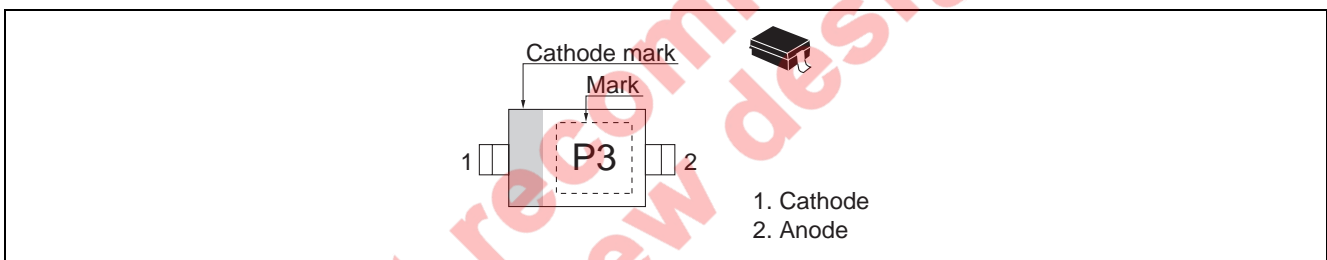
Features

- Low capacitance. ($C1 = 1.0$ 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_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	$V_R = 25 V$
Forward voltage	V_F	—	—	0.85	V	$I_F = 2 mA$
Capacitance	C_1	—	—	1.00	pF	$V_R = 1 V, f = 1 MHz$
	C_6	—	—	0.90		$V_R = 6 V, f = 1 MHz$
Forward resistance	r_f	—	0.55	0.70	Ω	$I_F = 2 mA, f = 100 MHz$

Not recommended
for new design

Main Characteristic

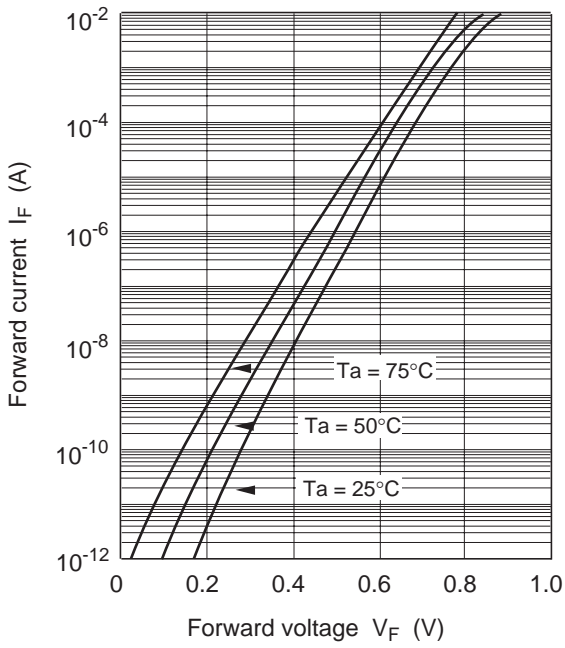


Fig.1 Forward current vs. Forward voltage

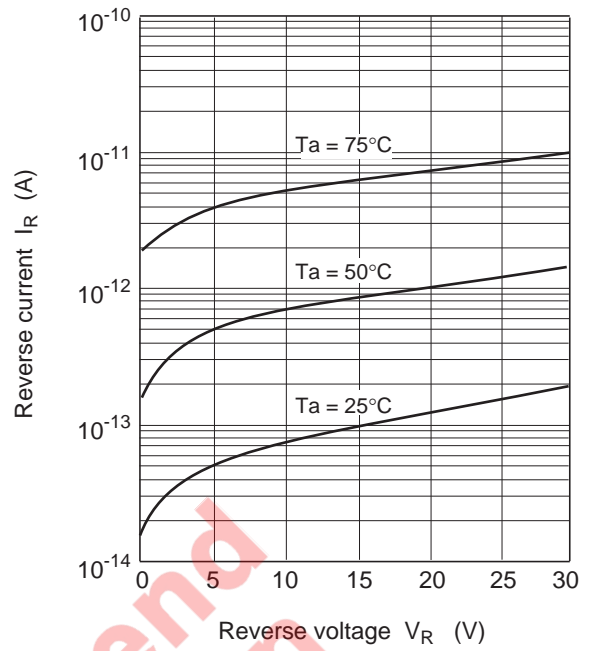


Fig.2 Reverse current vs. Reverse voltage

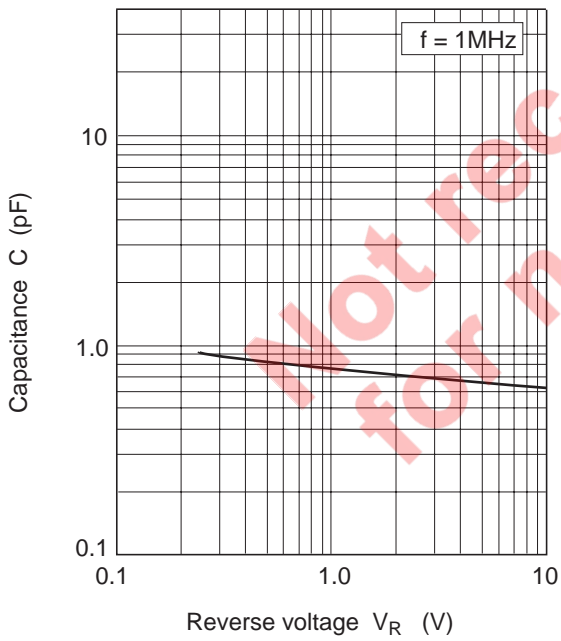


Fig.3 Capacitance vs. Reverse voltage

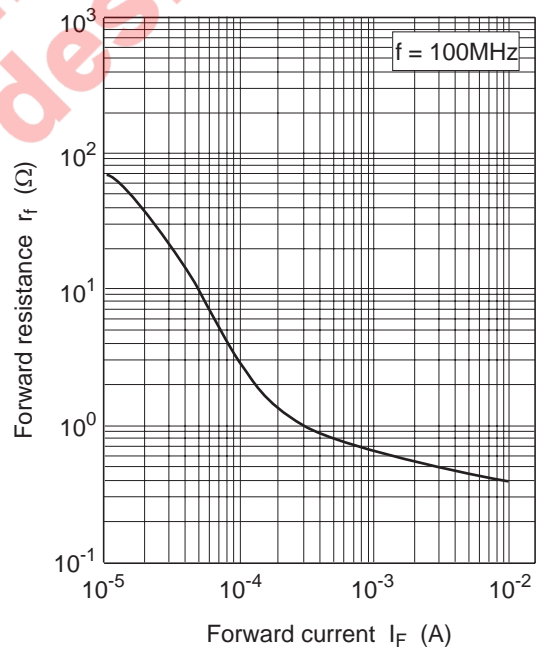


Fig.4 Forward resistance vs. Forward current

Package Dimensions

Technical drawing of the HVU133 package showing top and side views with dimensions:

- Top view width: 1.7 ± 0.15
- Top view length: 2.5 ± 0.15
- Side view height: 0.3 ± 0.15
- Side view total height: 1.25 ± 0.15
- Side view lead height: $0 - 0.10$
- Side view lead length: 0.9 ± 0.15

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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