

# HVU187

Silicon Epitaxial Planar Pin Diode for High Frequency Attenuator

# HITACHI

ADE-208-054D(Z)

Rev 4

Nov. 1998

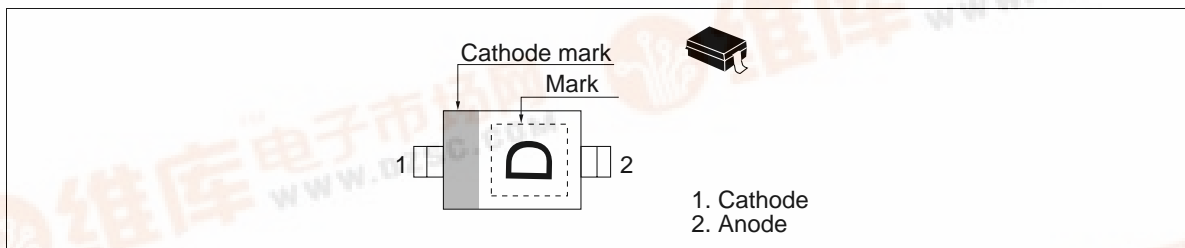
## Features

- Low forward resistance. ( $r_f=5.5\Omega$  max)
- Ultra small Resin Package (URP) is suitable for surface mount design.

## Ordering Information

Type No.	Laser Mark	Package Code
HVU187	D	URP

## Outline



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

Item	Symbol	Value	Unit
Reverse voltage	$V_R$	60	V
Forward current	$I_F$	50	mA
Power dissipation	$P_d$	100	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 current	$I_R$	—	—	100	nA	$V_R = 60V$
Forward voltage	$V_F$	—	—	1.0	V	$I_F = 10\text{ mA}$
Capacitance	$C$	—	—	2.4	pF	$V_R = 0V, f = 1\text{ MHz}$
Forward resistance	$r_f$	3.5	—	5.5	$\Omega$	$I_F = 10\text{ mA}, f = 100\text{ MHz}$
ESD-Capability <sup>1</sup>	—	200	—	—	V	$C=200\text{pF}$ , Both forward and reverse direction 1 pulse.

Notes 1. Failure criterion ;  $I_R \geq 100\text{nA}$  at  $V_R = 60V$

Main Characteristic

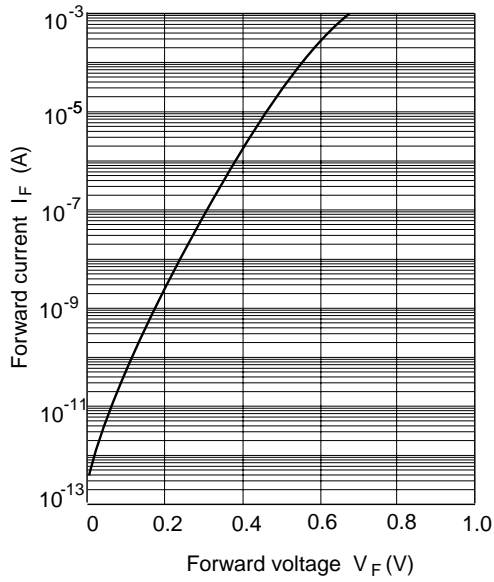


Fig.1 Forward current Vs. Forward voltage

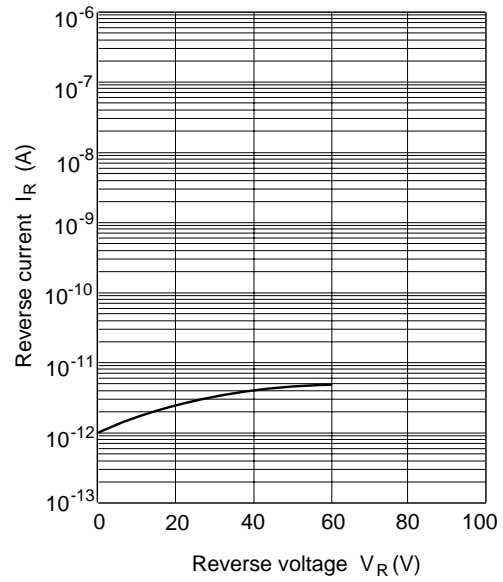


Fig.2 Reverse current Vs. Reverse voltage

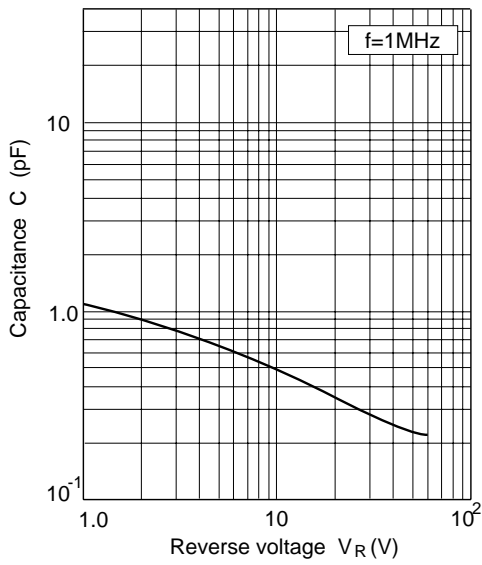


Fig.3 Capacitance Vs. Reverse voltage

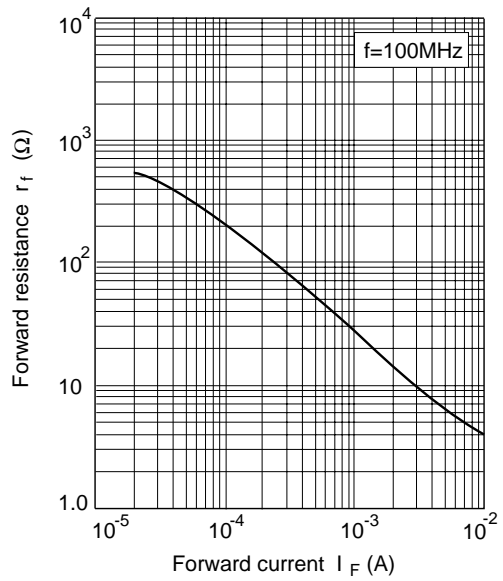


Fig.4 Forward resistance Vs. Forward current

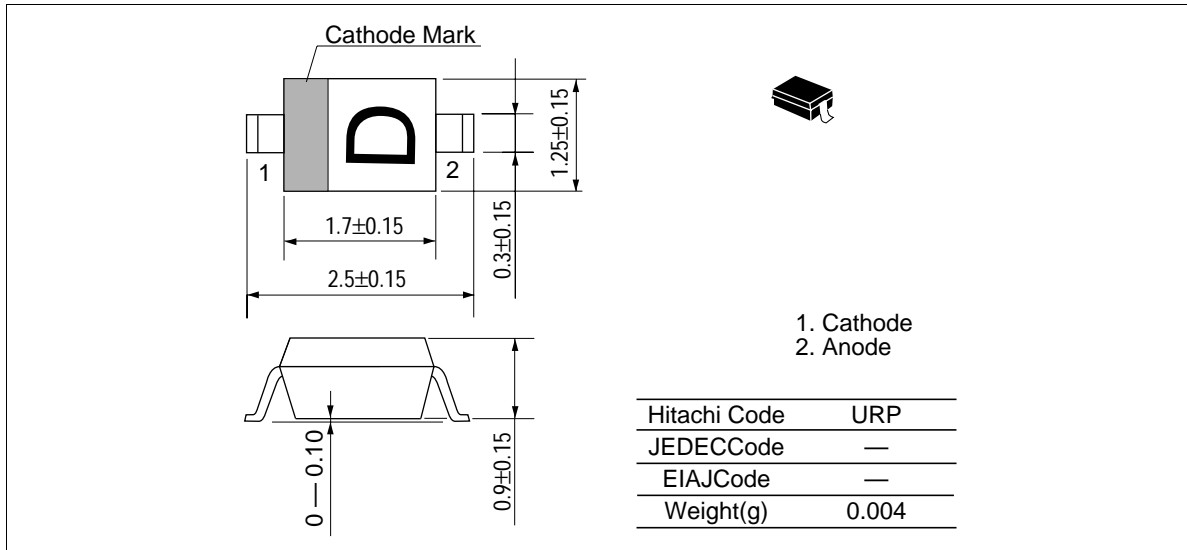
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## Package Dimensions

Unit : mm



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