

HVU187

Silicon Epitaxial Planar Pin Diode for High Frequency Attenuator

HITACHI

Preliminary
Rev. 3
May. 1993

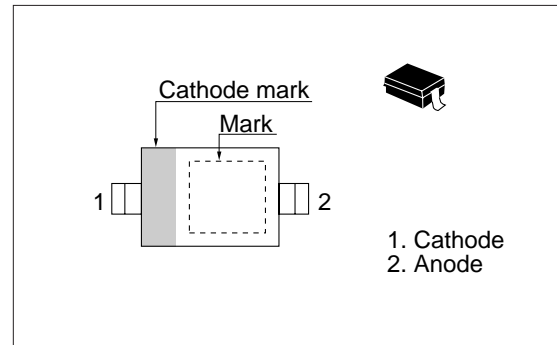
Features

- 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



Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

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	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +125	$^\circ\text{C}$

Electrical Characteristics ($T_a = 25^\circ\text{C}$)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	—	—	1.0	V	$I_F = 10$ mA
Reverse current	I_R	—	—	100	nA	$V_R = 60$ V
Capacitance	C	—	—	2.4	pF	$V_R = 0$ V, $f = 1$ MHz
Forward resistance	r_f	3.5	—	5.5	Ω	$I_F = 10$ mA, $f = 100$ MHz
ESD-Capability	—	200	—	—	V	*C=200pF, Both forward and reverse direction 1 pulse

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

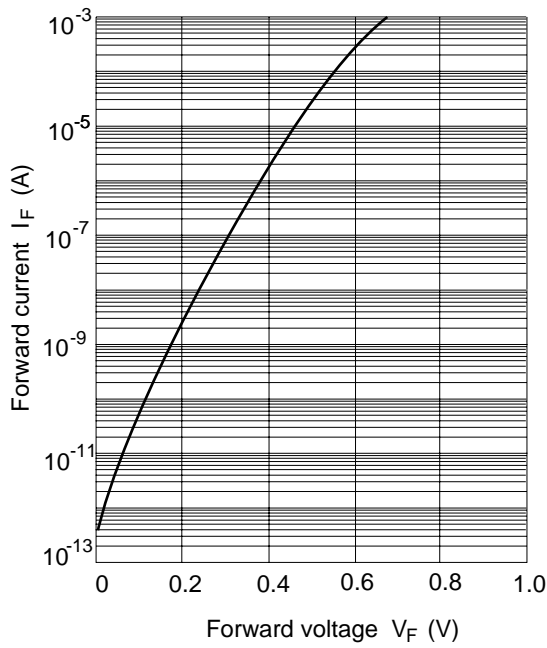


Fig.1 Forward current Vs. Forward voltage

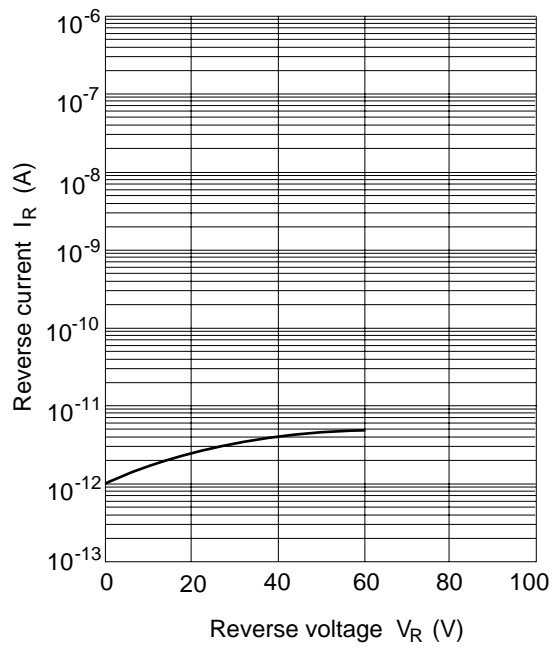


Fig.2 Reverse current Vs. Reverse voltage

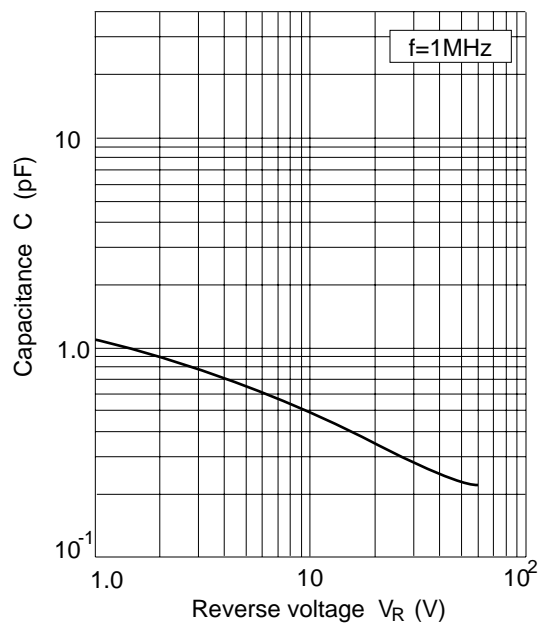


Fig.3 Capacitance Vs. Reverse voltage

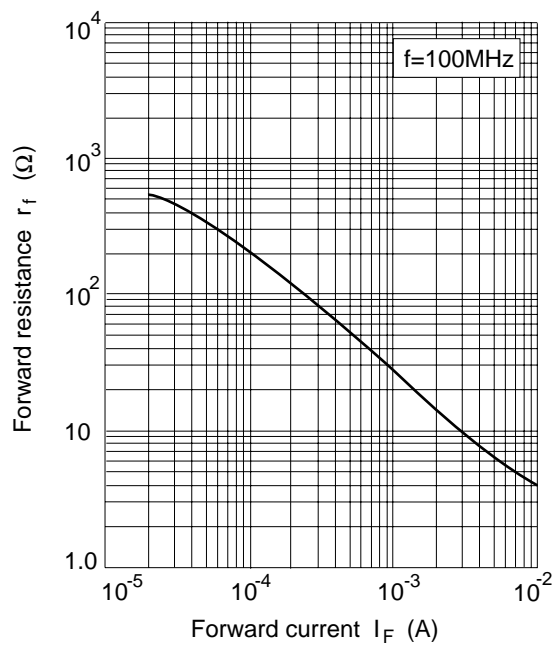
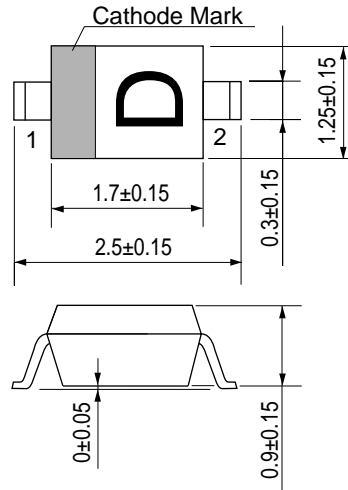


Fig.4 Forward resistance Vs. Forward current

Package Dimensions

Unit: mm



1 Cathode
2 Anode

HITACHI Code	URP
JEDEC Code	—
EIAJ Code	—
Weight (g)	0.004