# **HVC131**

Silicon Epitaxial Planar Pin Diode for High Frequency Switching

# **HITACHI**

ADE-208-422B(Z) Rev 2 Feb. 2000

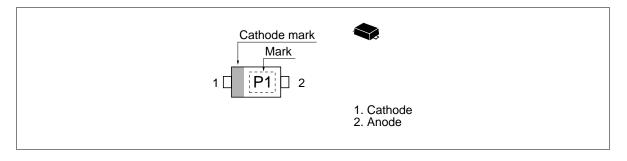
### **Features**

- Low capacitance.(C=0.8pF max)
- Low forward resistance. (rf= $1.0\Omega$  max)
- Ultra small Flat Package (UFP) is suitable for surface mount design.

## **Ordering Information**

Type No.	Laser Mark	Package Code
HVC131	P1	UFP

### **Outline**





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# Absolute Maximum Ratings ( $Ta = 25^{\circ}C$ )

Item	Symbol	Value	Unit		
Peak reverse voltage	$V_{RM}$	65	V		
Reverse voltage	V <sub>R</sub>	60	V		
Forward current	I <sub>F</sub>	100	mA		
Power dissipation	P <sub>d</sub>	150	mW		
Junction temperature	Tj	125	°C		
Storage temperature	Tstg	-55 to +125	°C		

## Electrical Characteristics ( $Ta = 25^{\circ}C$ )

Item	Symbol	Min	Тур	Max	Unit	Test Condition
Reverse current	I <sub>R</sub>	_	_	0.1	μΑ	$V_R = 60V$
Forward voltage	$V_{F}$	_	_	1.0	V	I <sub>F</sub> = 10 mA
Capacitance	С	_	_	0.8	pF	$V_R = 1V$ , $f = 1$ MHz
Forward resistance	r <sub>f</sub>	_	_	1.0	Ω	I <sub>F</sub> = 10 mA, f = 100 MHz

## **Main Characteristic**

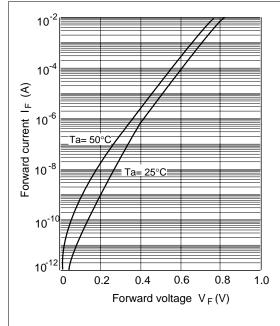


Fig.1 Forward current Vs. Forward voltage

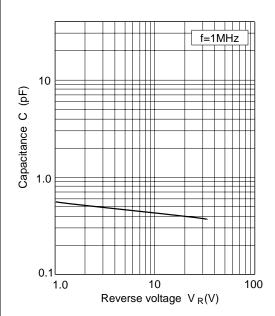


Fig.3 Capacitance Vs. Reverse voltage

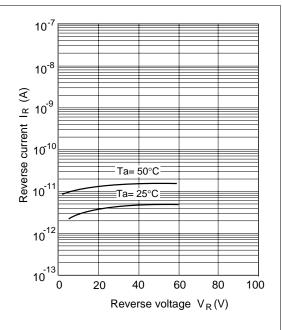


Fig.2 Reverse current Vs. Reverse voltage

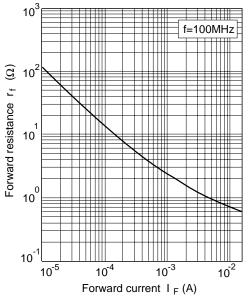
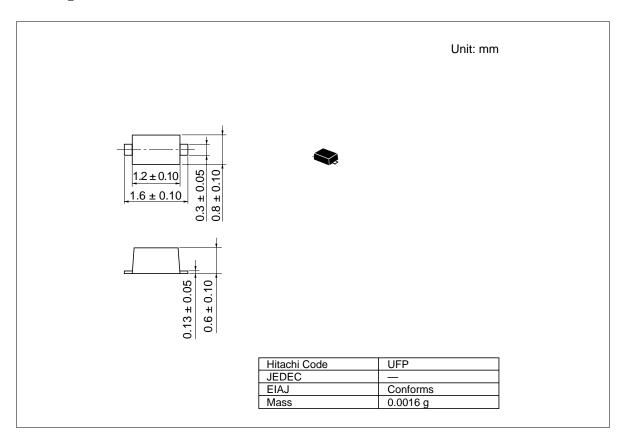


Fig.4 Forward resistance Vs. Forward current

# **HVC131**

## **Package Dimensions**



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