# **HVC132**

Silicon Epitaxial Planar Pin Diode for High Frequency Switching

# **HITACHI**

ADE-208-429B (Z) Rev 2 Feb. 2000

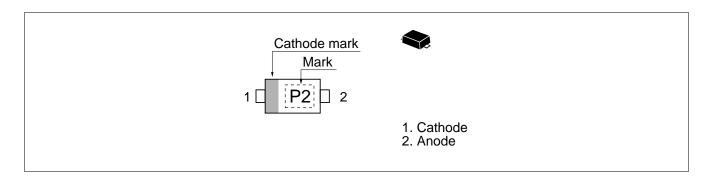
#### **Features**

- Low capacitance.(C=0.5pF max)
- Low forward resistance. (rf= $2.0\Omega$  max)
- Ultra small Flat Package (UFP) is suitable for surface mount design.

### **Ordering Information**

Type No.	Laser Mark	Package Code
HVC132	P2	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	$V_R$	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	_	_	0.5	pF	$V_R = 1V$ , $f = 1 MHz$
Forward resistance	r <sub>f</sub>	_	_	2.0	Ω	I <sub>F</sub> = 10 mA, f = 100 MHz

#### **Main Characteristic**

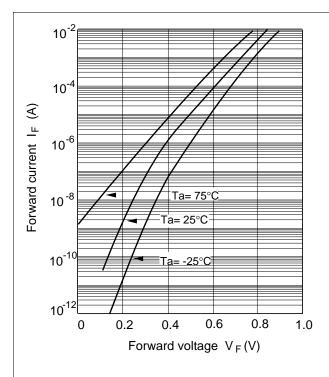


Fig.1 Forward current Vs. Forward voltage

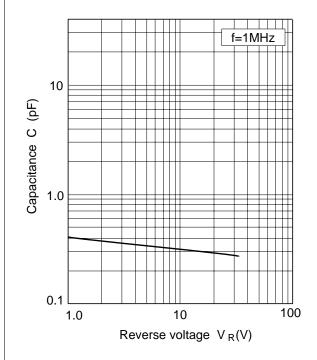


Fig.3 Capacitance Vs. Reverse voltage

10<sup>-7</sup>
10<sup>-8</sup>

10<sup>-9</sup>
Ta= 75°C

10<sup>-13</sup>
0 20 40 60 80 100

Reverse voltage V<sub>R</sub>(V)

Fig.2 Reverse current Vs. Reverse voltage

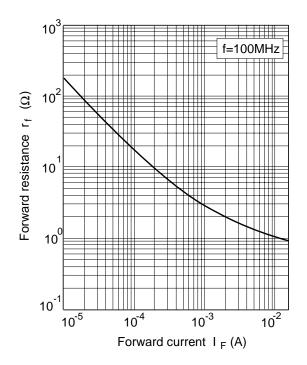
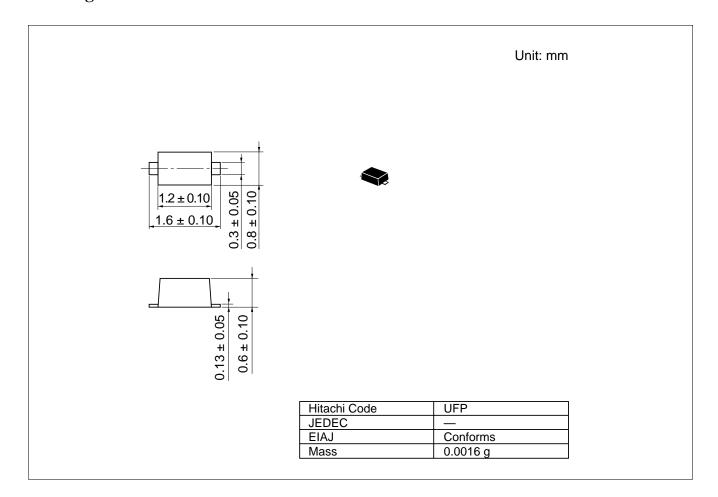


Fig.4 Forward resistance Vs. Forward current

# **HVC132**

## **Package Dimensions**



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