

# HVU131

## Silicon Epitaxial Planar Pin Diode for Antenna Switching

REJ03G0435-0600  
(Previous: ADE-208-239E)  
Rev.6.00  
Oct 29, 2004

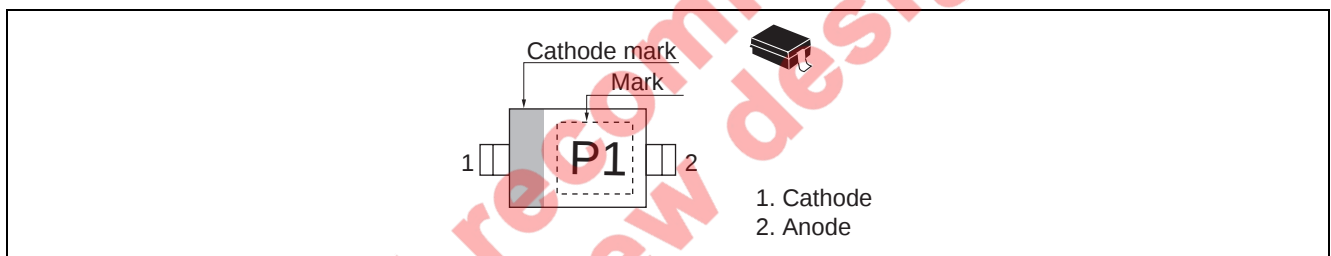
### Features

- Low capacitance. ( $C = 0.8 \text{ pF max}$ )
- Low forward resistance. ( $r_f = 1.0 \Omega \text{ max}$ )
- Ultra small Resin Package (URP) is suitable for surface mount design.

### Ordering Information

| Type No. | Laser Mark | Package Code |
|----------|------------|--------------|
| HVU131   | P1         | URP          |

### Pin Arrangement



## Absolute Maximum Ratings

(Ta = 25°C)

| Item                 | Symbol    | Value       | Unit |
|----------------------|-----------|-------------|------|
| Peak reverse voltage | $V_{RM}$  | 65          | V    |
| Reverse voltage      | $V_R$     | 60          | V    |
| Forward current      | $I_F$     | 100         | mA   |
| 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 current    | $I_R$  | —   | —   | 0.1 | $\mu A$  | $V_R = 60 V$               |
| Forward voltage    | $V_F$  | —   | —   | 1.0 | V        | $I_F = 10 mA$              |
| Capacitance        | C      | —   | —   | 0.8 | pF       | $V_R = 1 V, f = 1 MHz$     |
| Forward resistance | $r_f$  | —   | —   | 1.0 | $\Omega$ | $I_F = 10 mA, f = 100 MHz$ |

Not recommended  
for new design

## Main Characteristic

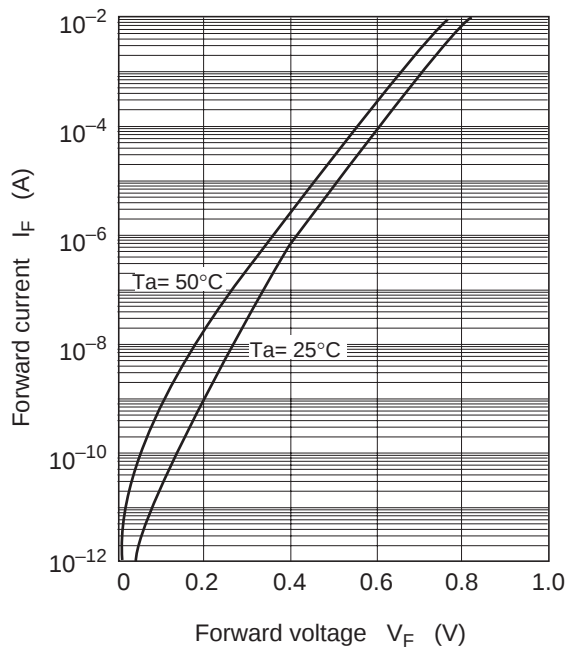


Fig.1 Forward current vs. Forward voltage

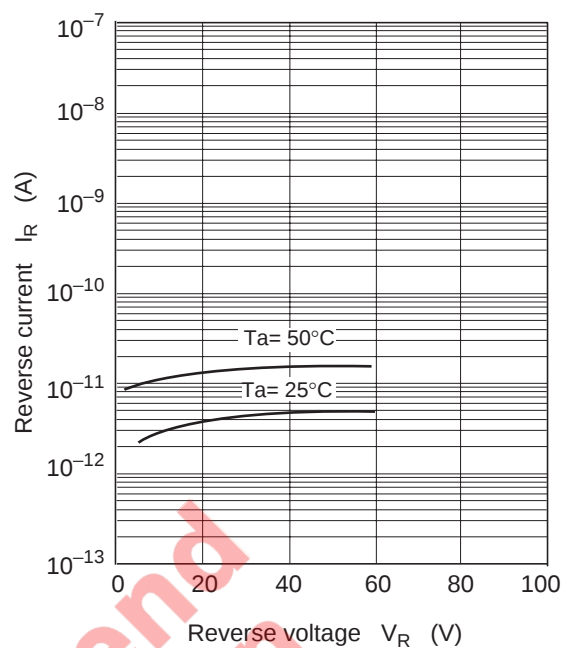


Fig.2 Reverse current vs. Reverse voltage

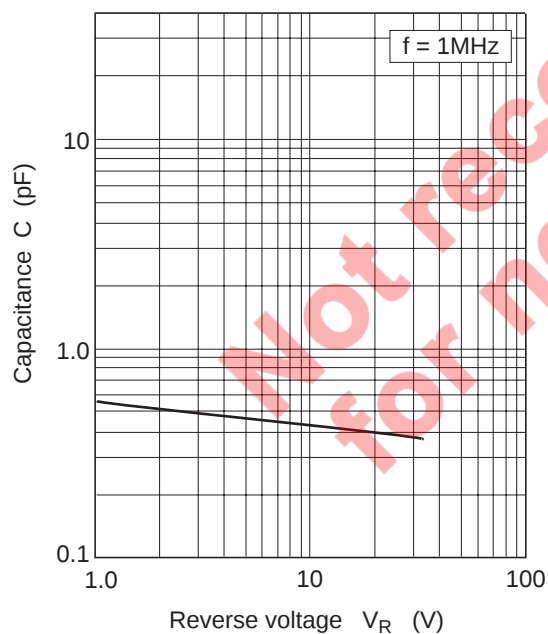


Fig.3 Capacitance vs. Reverse voltage

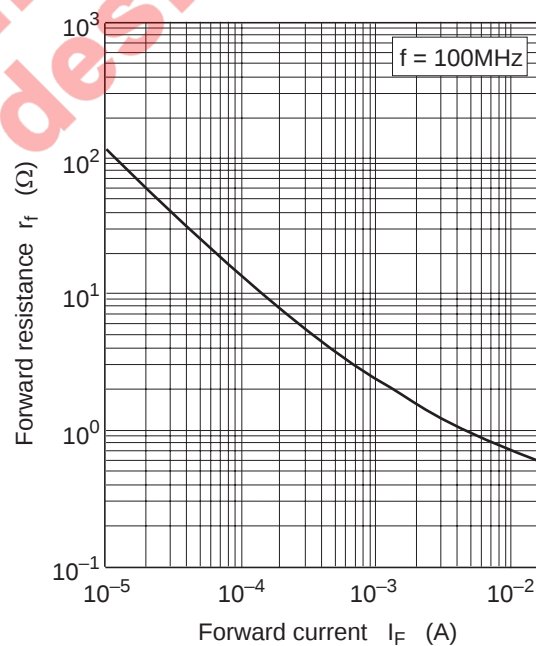
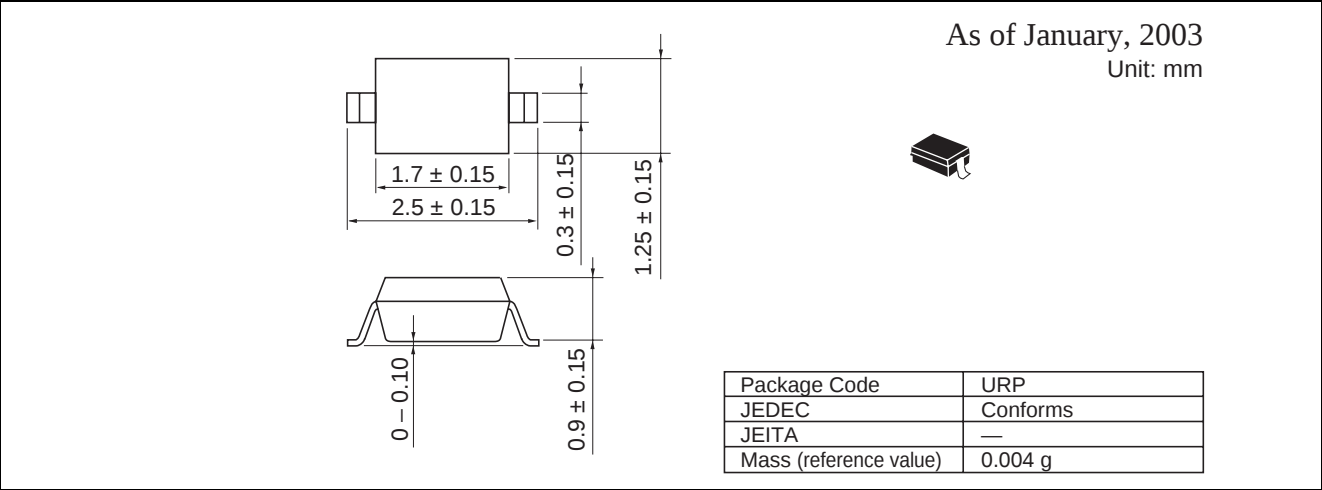


Fig.4 Forward resistance vs. Forward current

Package Dimensions



Not recommend  
for new design

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