

To our customers,

Old Company Name in Catalogs and Other Documents

On April 1st, 2010, NEC Electronics Corporation merged with Renesas Technology Corporation, and Renesas Electronics Corporation took over all the business of both companies. Therefore, although the old company name remains in this document, it is a valid Renesas Electronics document. We appreciate your understanding.

Renesas Electronics website: <http://www.renesas.com>

April 1st, 2010
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (<http://www.renesas.com>)

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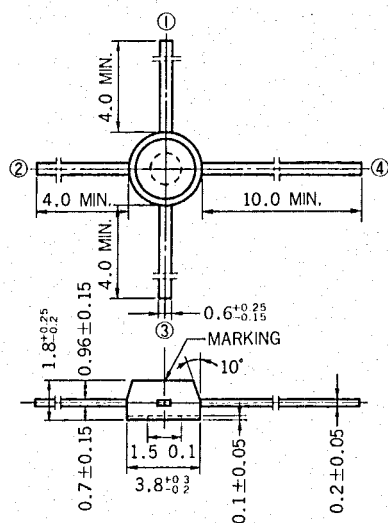
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(Note 2) “Renesas Electronics product(s)” means any product developed or manufactured by or for Renesas Electronics.

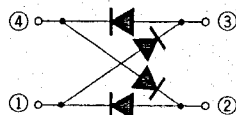
UHF DOUBLE BALANCED MODULATOR SILICON EPITAXIAL SCHOTTKY BARRIER DIODE QUAD

PACKAGE DIMENSIONS

(Unit : mm)



CONFIGURATION



The ND487C2-3R is schottky barrier diode quad interconnected in cross configuration, especially designed for use in double balanced mixers, phase detectors, AM modulators, and pulse modulators.

FEATURES

- Monolithic array
- Diode cross configuration
- Wideband operation
- Small size package
- Low cost

ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

| | | | |
|-----------------------|-----------|-------------|---------------------------|
| DC Power Dissipation | P_d | 75 | mW/Junction |
| Junction Temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage Temperature | T_{stg} | -65 to +150 | $^\circ\text{C}$ |
| Soldering Temperature | | 230 | $^\circ\text{C}$ for 10 s |

ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

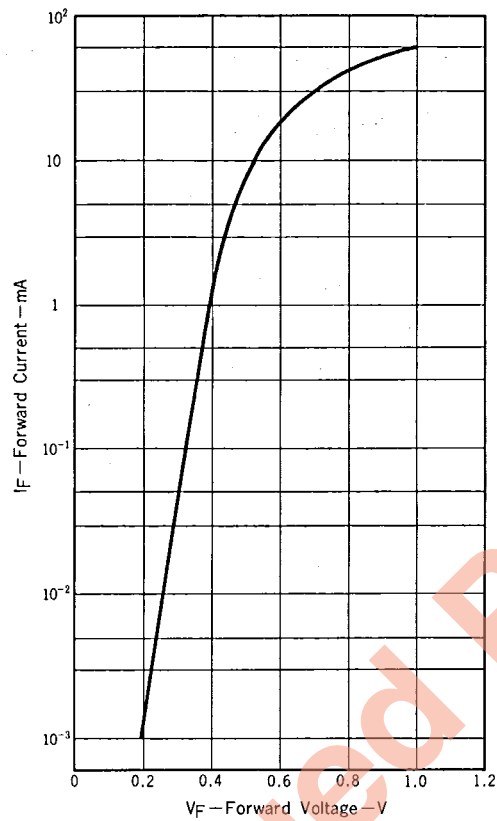
| CHARACTERISTIC | SYMBOL | MIN. | TYP. | MAX. | UNIT | TEST CONDITIONS |
|----------------------------|-------------------------|------|------|------|------|-------------------------------|
| Forward Voltage | V_{F1} | | | 1.0 | V | $I_F = 50\text{ mA}$ |
| Forward Voltage | V_{F2} | | 0.4 | 0.5 | V | $I_F = 1\text{ mA}$ |
| Delta Forward Voltage | ΔV_{F2} (NOTE1) | | | 0.02 | V | $I_F = 1\text{ mA}$ |
| Terminal Capacitance | C_t (NOTE2) | | 0.9 | 1.2 | pF | $V_R = 0, f = 1.0\text{ MHz}$ |
| Delta Terminal Capacitance | ΔC_t (NOTE1) | | | 0.2 | pF | $V_R = 0, f = 1.0\text{ MHz}$ |

NOTE 1 : Difference of V_F, C_t

2 : Measurement terminal ①-④, ②-③

TYPICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

FORWARD CURRENT vs. FORWARD VOLTAGE



CONVERSION LOSS vs. LOCAL POWER

