

To our customers,

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## Old Company Name in Catalogs and Other Documents

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On April 1<sup>st</sup>, 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 1<sup>st</sup>, 2010  
Renesas Electronics Corporation

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

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

DOUBLE BALANCED MODULATOR  
Si EPITAXIAL SCHOTTKY BARRIER DIODE QUAD

FEATURES

- 1 chip double balanced module
- Ring type connection
- Wide band operation
- Small package (6 pins mini mold)

ORDERING INFORMATION

PART NUMBER	PACKAGE	PACKING STYLE
ND487R1T-E3	6 Pins Mini Mold	Embossed tape 8 mm wide, QTY 3 K/Reel Pin 1, 2, 3 face to perforation side of the tape.

ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub> = 25 °C)

CHARACTERISTIC	SYMBOL	RATINGS	UNIT
Power Dissipation	P <sub>d</sub>	75 <sup>Note 1</sup>	mW
Junction Temperature	T <sub>j</sub>	+150	°C
Storage Temperature	T <sub>stg</sub>	-65 to +150	°C

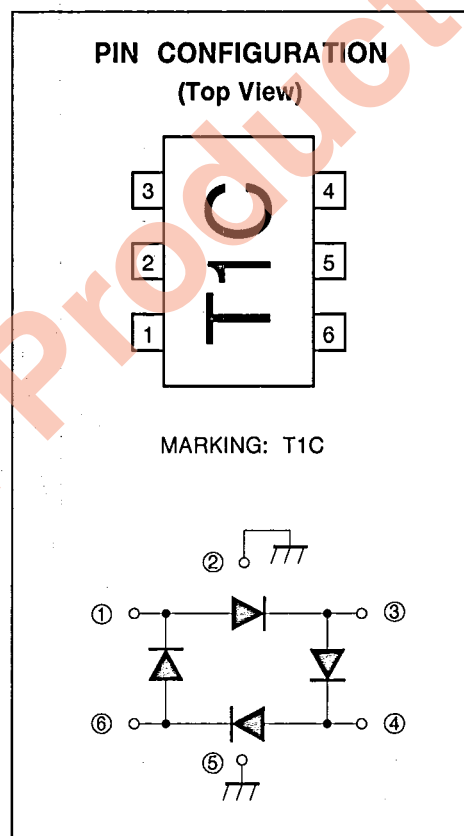
Note 1. Power Dissipation of each junction.

ELECTRICAL CHARACTERISTICS (T<sub>A</sub> = 25 °C)

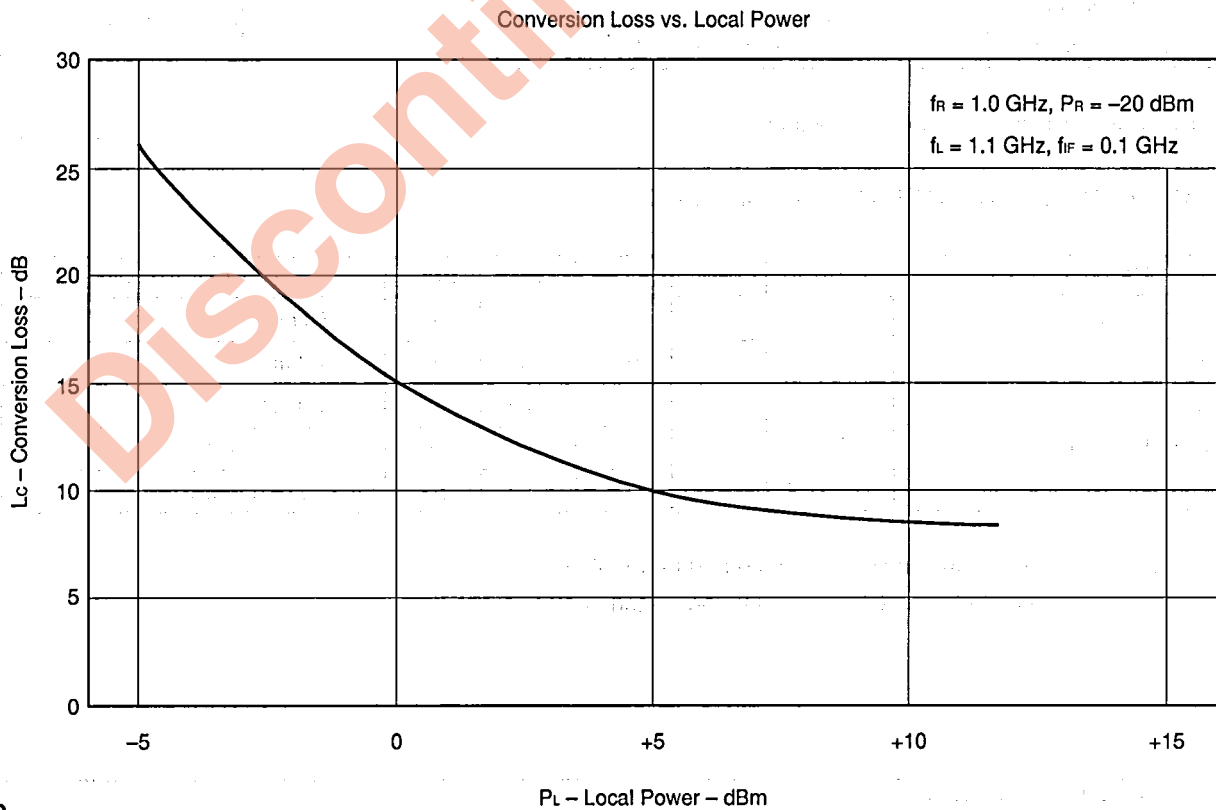
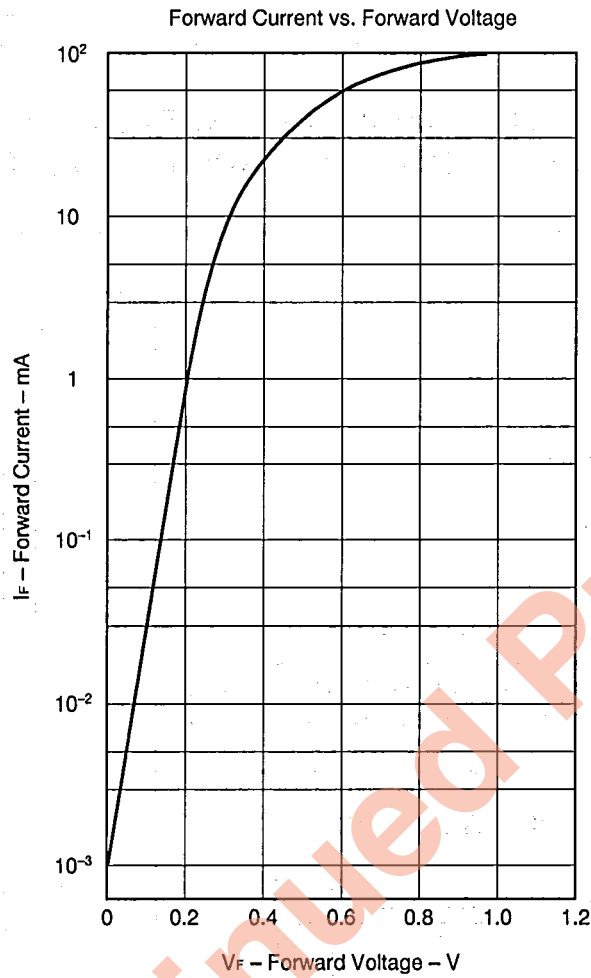
CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Forward Voltage	V <sub>F1</sub>			0.9	V	I <sub>F</sub> = 50 mA
Forward Voltage	V <sub>F2</sub>		0.2	0.3	V	I <sub>F</sub> = 1.0 mA
Delta Forward Voltage	ΔV <sub>F2</sub>			0.02	V	I <sub>F</sub> = 1.0 mA
Terminal Capacitance	C <sub>t</sub> <sup>Note 2</sup>		1.2		pF	V <sub>R</sub> = 0, f = 1.0 MHz
Delta Terminal Capacitance	ΔC <sub>t</sub> <sup>Note 3</sup>		0.1		pF	V <sub>R</sub> = 0, f = 1.0 MHz

Notes 2. Capacitance between ① and ④, ③ and ⑥ terminals.

3. C<sub>t</sub> difference between ① and ④, ③ and ⑥ terminals.

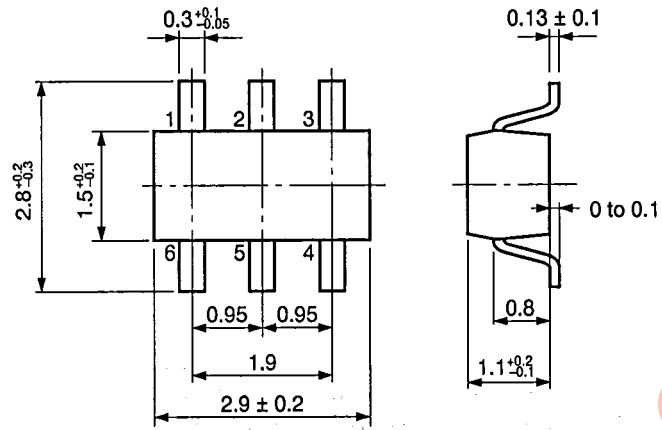


TYPICAL CHARACTERISTICS (T<sub>A</sub> = 25 °C)



PACKAGE DIMENSIONS (Unit: mm)

6 Pins Mini Mold Package



Discontinued Product

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NEC devices are classified into the following three quality grades:

"Standard", "Special", and "Specific". The Specific quality grade applies only to devices developed based on a customer designated "quality assurance program" for a specific application. The recommended applications of a device depend on its quality grade, as indicated below. Customers must check the quality grade of each device before using it in a particular application.

Standard: Computers, office equipment, communications equipment, test and measurement equipment, audio and visual equipment, home electronic appliances, machine tools, personal electronic equipment and industrial robots

Special: Transportation equipment (automobiles, trains, ships, etc.), traffic control systems, anti-disaster systems, anti-crime systems, safety equipment and medical equipment (not specifically designed for life support)

Specific: Aircrafts, aerospace equipment, submersible repeaters, nuclear reactor control systems, life support systems or medical equipment for life support, etc.

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Anti-radioactive design is not implemented in this product.