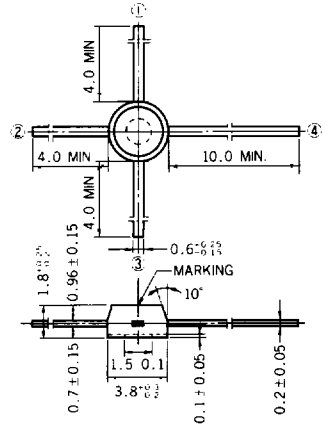
NEC
ELECTRON DEVICE

UHF MODULATOR DIODE QUAD

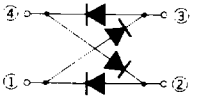
ND487C1-3R

UHF DOUBLE BALANCED MODULATOR
SILICON EPITAXIAL SCHOTTKY BARRIER DIODE QUAD

PACKAGE DIMENSIONS
(Unit : mm)



CONFIGURATION



The ND487C1-3R 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 (Ta = 25 °C)

DC Power Dissipation	P_d	75	mW/Junction
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	−65 to +150	°C
Soldering Temperature		230	°C for 10 s

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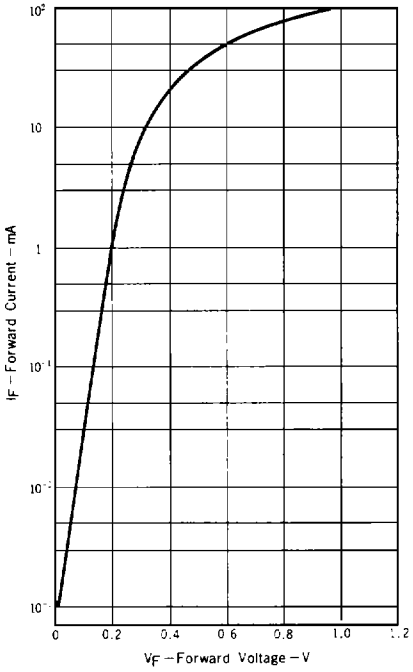
ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Forward Voltage	V_{F1}			0.7	V	I_F = 50 mA
Forward Voltage	V_{F2}		0.2	0.3	V	I_F = 1.0 mA
Delta Forward Voltage	ΔV_{F2} (NOTE1)			0.02	V	I_F = 1.0 mA
Terminal Capacitance	C_t (NOTE2)		0.9	1.2	pF	V_R = 0, f = 1.0 MHz
Delta Terminal Capacitance	ΔC_t (NOTE1)			0.2	pF	V_R = 0, f = 1.0 MHz

NOTE 1 : Difference of V_F, C_t
2 : Measurement terminal ①−④ ②−③

TYPICAL CHARACTERISTICS (Ta = 25 °C)

FORWARD CURRENT vs. FORWARD VOLTAGE



CONVERSION LOSS vs. LOCAL POWER