

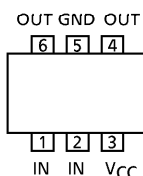
TA4000F

VHF~UHF WIDE BAND AMPLIFIER APPLICATIONS

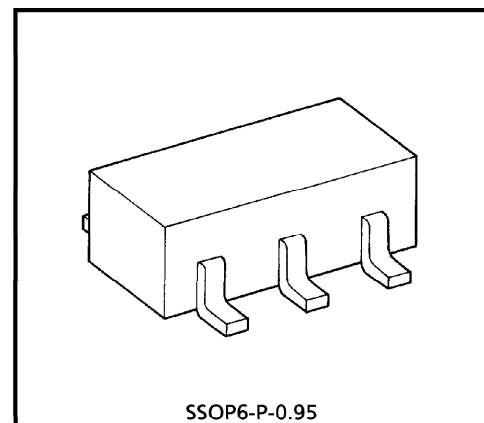
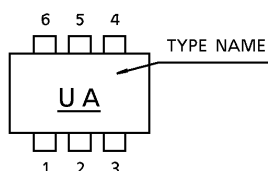
FEATURES

- Band Width 700 MHz (Min.) @3 dB down
- Low Noise 4 dB (Typ.) @f = 400 MHz
- Small Package

PIN ASSIGNMENT (TOP VIEW)



MARKING



SSOP6-P-0.95

Weight : 0.014 g (Typ.)

MAXIMUM RATINGS (Ta = 25°C)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|-------------------------|--------------------|---------|------|
| Supply Voltage | V _{CC} | 6 | V |
| Total Power Dissipation | P _D (*) | 300 | mW |
| Operating Temperature | T _{opr} | -40~85 | °C |
| Storage Temperature | T _{stg} | -55~125 | °C |

(*) : When mounted on the glass epoxy board of 2.5 cm² × 1.6 t

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

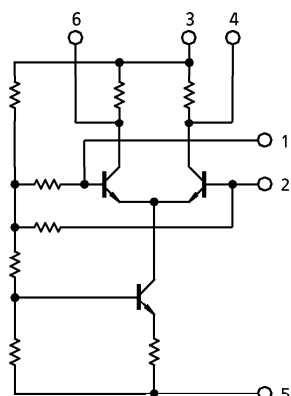
| CHARACTERISTIC | SYMBOL | TEST CIR-CUIT | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|----------------------|--------------------------------|---------------|---|------|------|------|------|
| Circuit Current | I _{CC} | — | V _{CC} = 5V, ZERO Carrier | 9 | 12 | 15 | mA |
| Gain | S ₂₁ ² | 1 | V _{CC} = 5V, f = 400MHz | 11 | 15 | 18 | dB |
| Noise Figure | NF | 1 | V _{CC} = 5V, f = 400MHz | — | 4 | 7 | dB |
| Band Width | BW | 1 | V _{CC} = 5V (Note) | 0.7 | 1.3 | — | GHz |
| Maximum Output Level | P _O | 1 | V _{CC} = 5V, f = 400MHz Pin = -10dBmW | -8 | -2 | — | dBmW |

(Note) : Frequency of 3 dB down to |S₂₁|² (at f = 400 MHz)

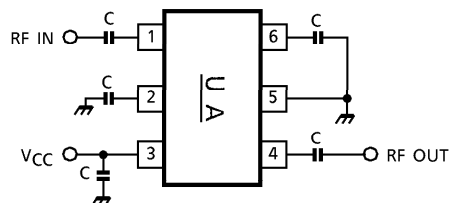
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EQUIVALENT CIRCUIT



RF MEASURE CIRCUIT 1



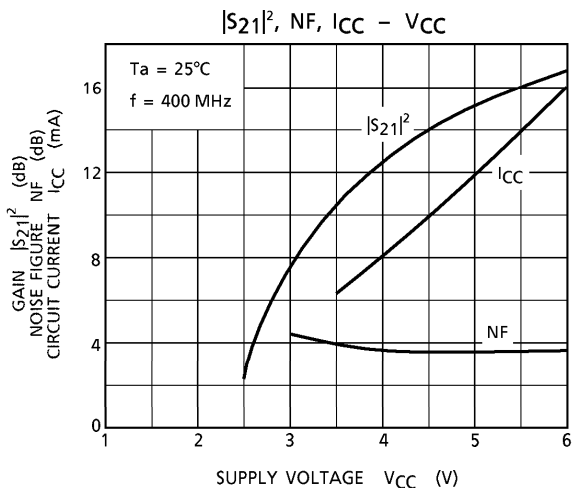
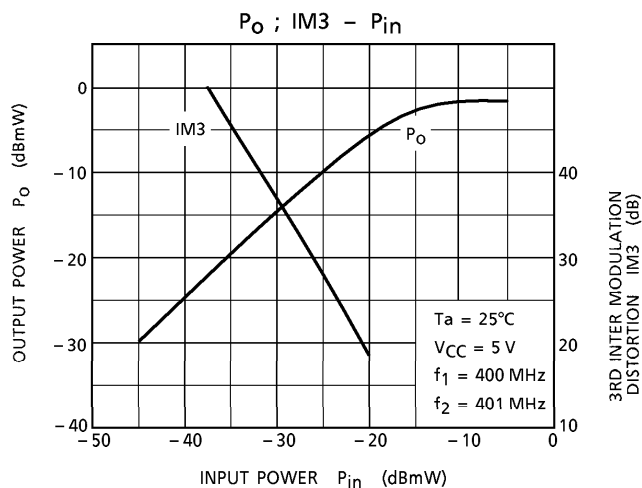
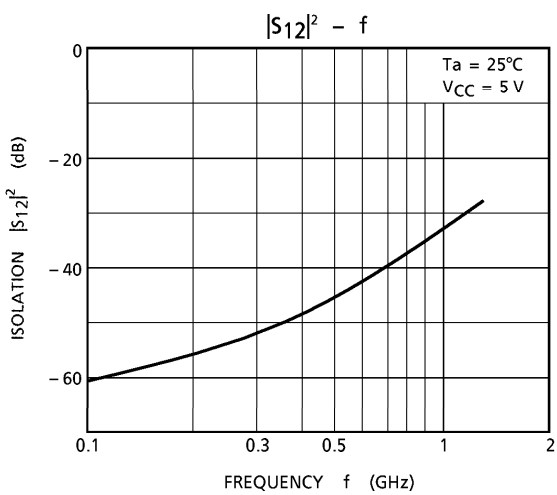
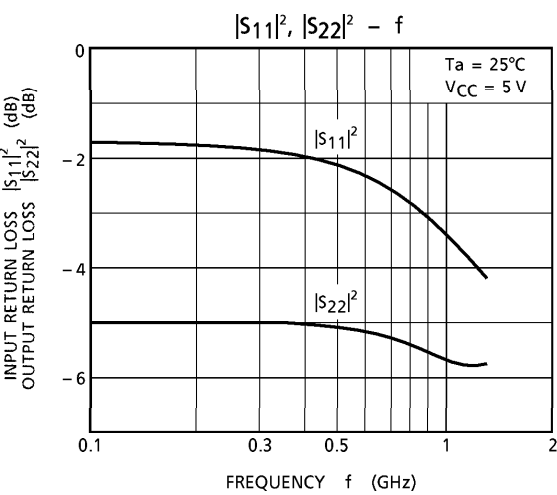
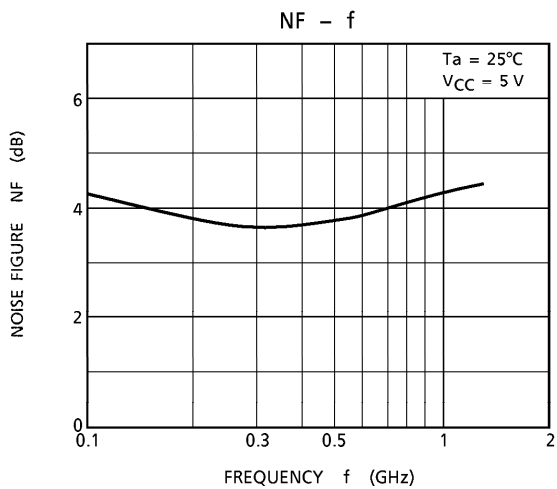
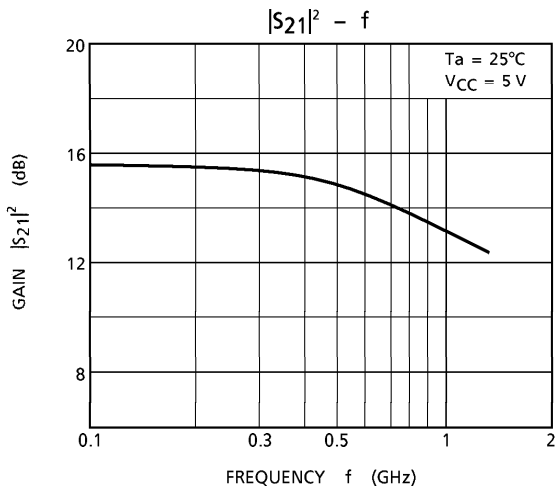
(*) C : 1000 pF & 10000 pF

NOTICE

The circuits and measurements contained in this document are given only in the context of as examples of applications for these products.

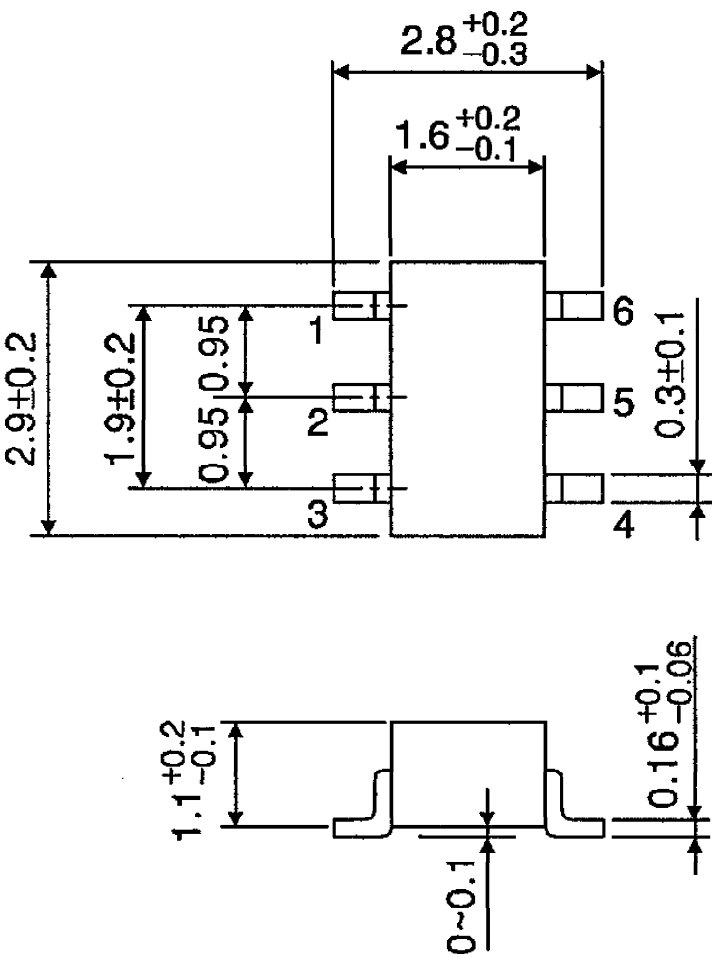
Moreover, these example application circuits are not intended for mass production, since the high-frequency characteristics (the AC characteristics) of these devices will be affected by the external components which the customer uses, by the design of the circuit and by various other conditions. It is the responsibility of the customer to design external circuits which correctly implement the intended application, and to check the characteristics of the design.

TOSHIBA assume no responsibility for the integrity of customer circuit designs or applications.



PACKAGE DIMENSIONS
SSOP6-P-0.95

Unit : mm



Weight : 0.014 g (Typ.)