

TOSHIBA BIPOLAR LINEAR INTEGRATED CIRCUIT SILICON MONOLITHIC

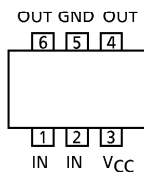
# TA4000F

## VHF~UHF WIDE BAND AMPLIFIER APPLICATIONS

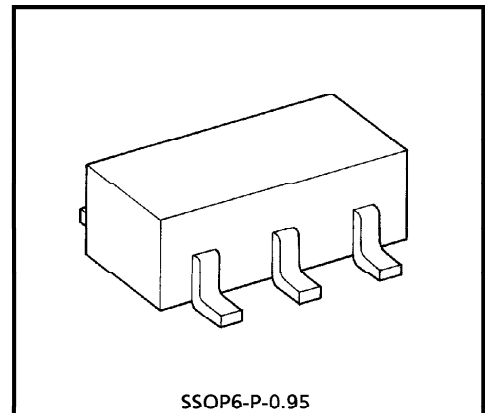
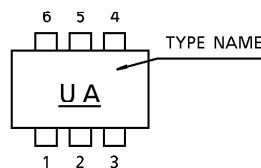
### FEATURES

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

### PIN ASSIGNMENT (TOP VIEW)



### Marking



Weight : 0.014g (Typ.)

### MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Supply Voltage	V <sub>CC</sub>	6	V
Total Power Dissipation	P <sub>D</sub> *	300	mW
Operating Temperature	T <sub>opr</sub>	-40~85	°C
Storage Temperature	T <sub>stg</sub>	-55~125	°C

\* When mounted on the glass epoxy board of 2.5cm<sup>2</sup> x 1.6t

### ELECTRICAL CHARACTERISTICS (Ta = 25°C)

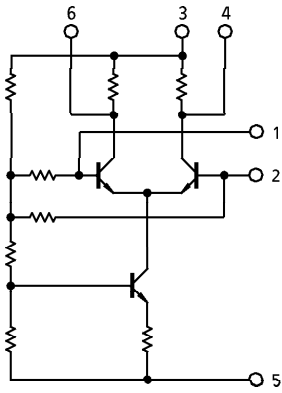
CHARACTERISTIC	SYMBOL	TEST CIRCUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Circuit Current	I <sub>CC</sub>	—	V <sub>CC</sub> = 5V, ZERO Carrier	9	12	15	mA
Gain	S <sub>21</sub>   <sup>2</sup>	1	V <sub>CC</sub> = 5V, f = 400MHz	11	15	18	dB
Noise Figure	NF	1	V <sub>CC</sub> = 5V, f = 400MHz	—	4	7	dB
Band Width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

(Note) Frequency of 3dB down to |S<sub>21</sub>|<sup>2</sup> (at f = 400MHz)

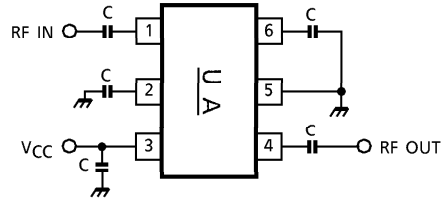
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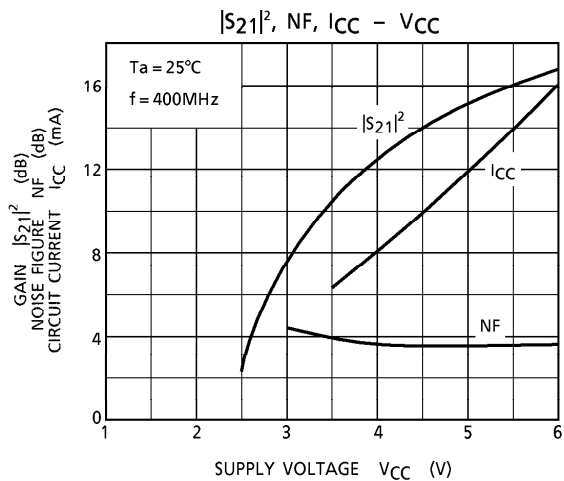
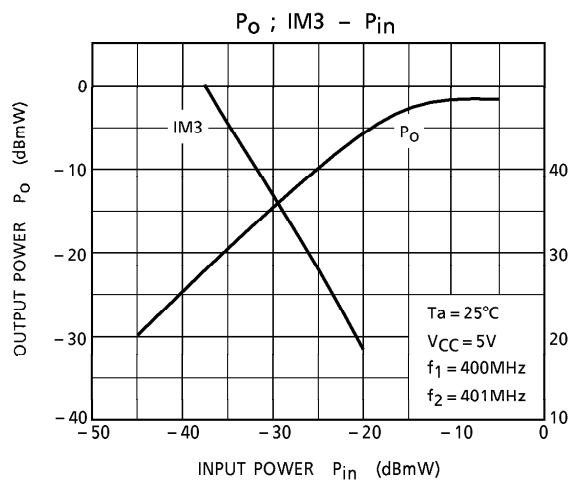
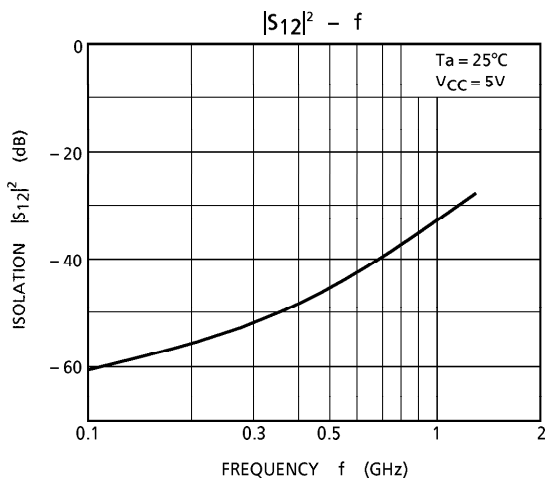
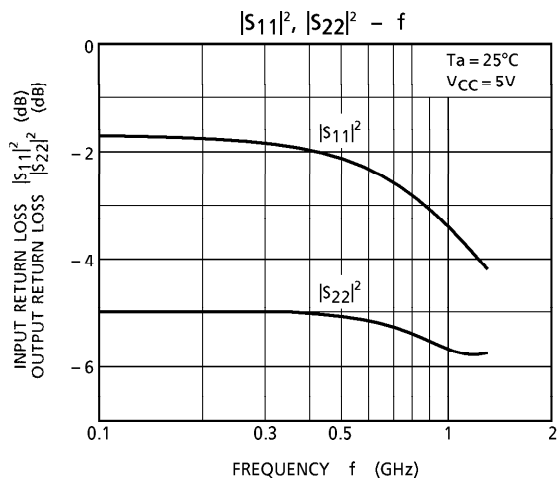
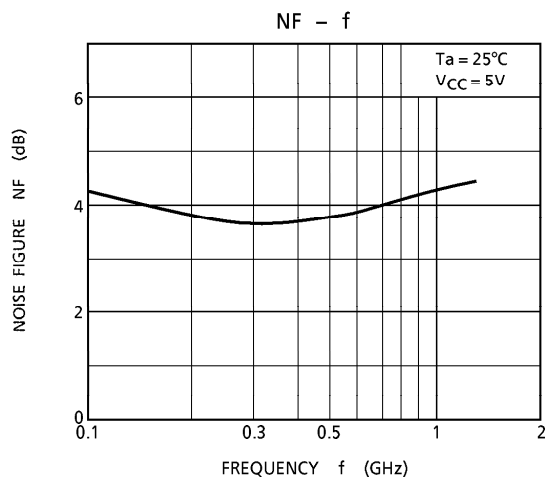
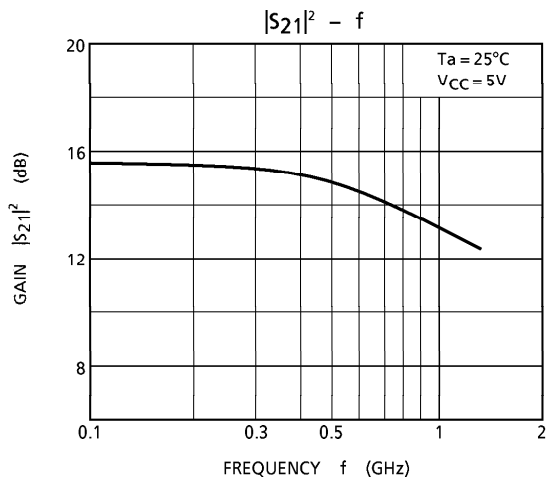
EQUIVALENT CIRCUIT



RF MEASURE CIRCUIT 1

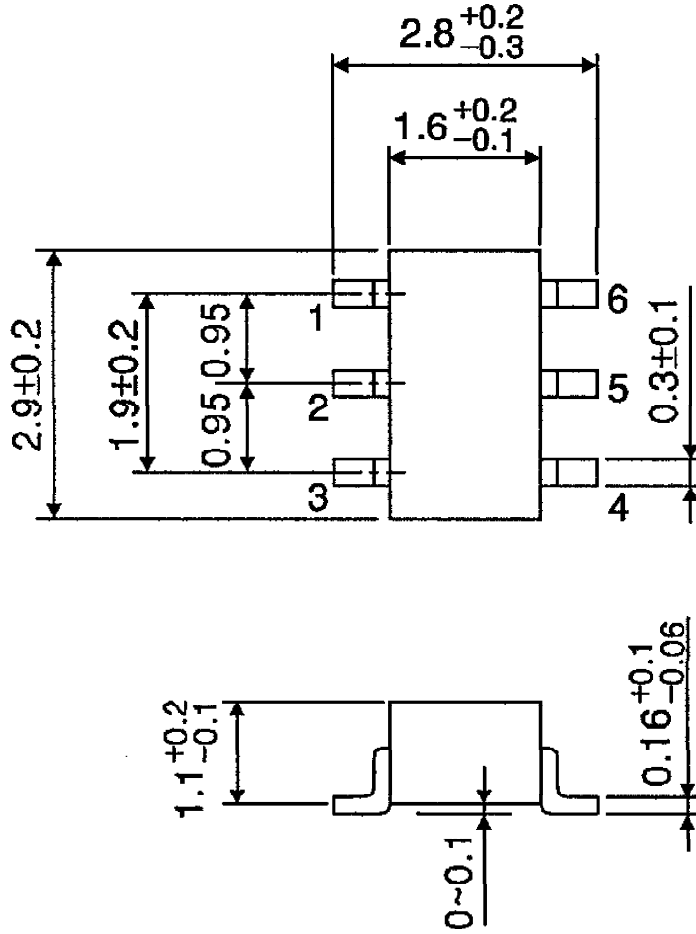


(\*) C : 1000pF & 10000pF



OUTLINE DRAWING  
SSOP6-P-0.95

Unit : mm



Weight : 0.014g (Typ.)