TOSHIBA BIPOLAR LINEAR INTEGRATED CIRCUIT SILICON MONOLITHIC

TA4000F

VHF~UHF WIDE BAND AMPLIFIER APPLICATIONS

Marking

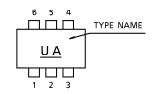
FEATURES

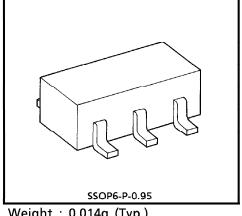
@3dB down Band Width 700MHz (Min.) Low Noise 4dB (Typ.) @f = 400MHz

Small Package

PIN ASSIGNMENT (TOP VIEW)







Weight: 0.014g (Typ.)

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Supply Voltage	Vcc	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 $2.5 \text{cm}^2 \times 1.6 \text{t}$

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CIR- CUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Circuit Current	lcc	_	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	Po	1	V _{CC} = 5V, f = 400MHz Pin = -10dBmW	-8	- 2	_	dBmW

(Note) Frequency of 3dB down to $|S_{21}|^2$ (at f = 400MHz)

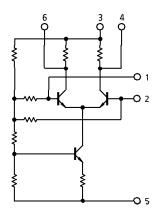
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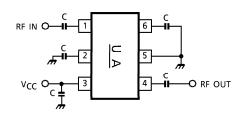
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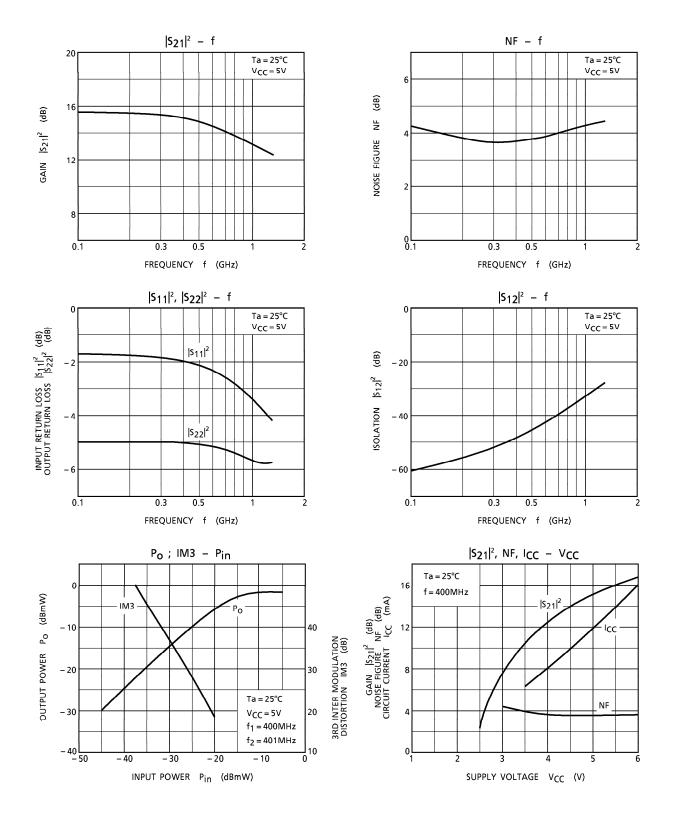
EQUIVALENT CIRCUIT



RF MEASURE CIRCUIT 1

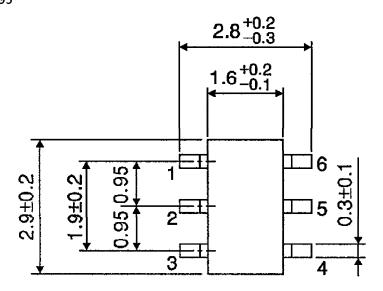


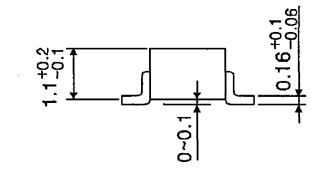
(*) C: 1000pF & 10000pF



OUTLINE DRAWING SSOP6-P-0.95

Unit: mm





Weight: 0.014g (Typ.)