TOSHIBA BIPOLAR LINEAR INTEGRATED CIRCUIT SILICON MONOLITHIC

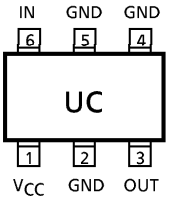
TA4008F

1.6GHz BAND BUFFER AMPLIFIER APPLICATION

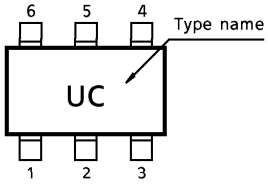
FEATURES

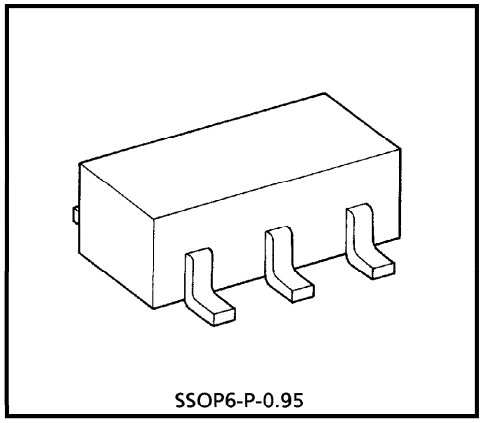
- Low current : I_{CC} = 9mA (Typ.)
- Recommended operating voltage : V_{CC} = 2.7~3.3V

PIN ASSIGNMENT (TOP VIEW)



MARKING





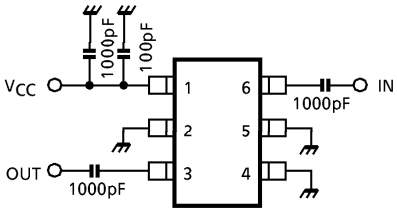
Weight : 0.014g (Typ.)

MAXIMUM RATING (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 Range	T_{stg}	−55~125	°C

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

TEST CIRCUIT 1

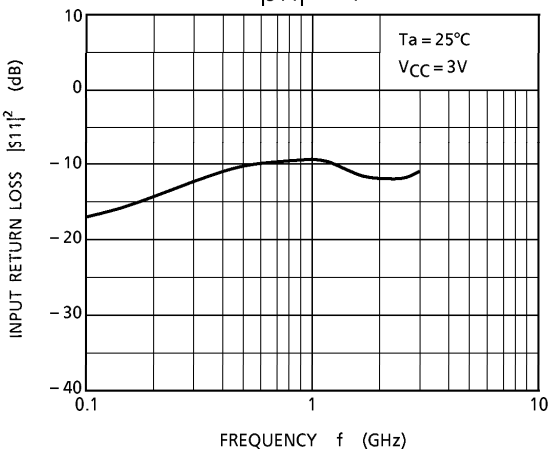


ELECTRICAL CHARACTERISTICS (V_{CC} = 3V, Ta = 25°C, Zg = Zl = 50Ω)

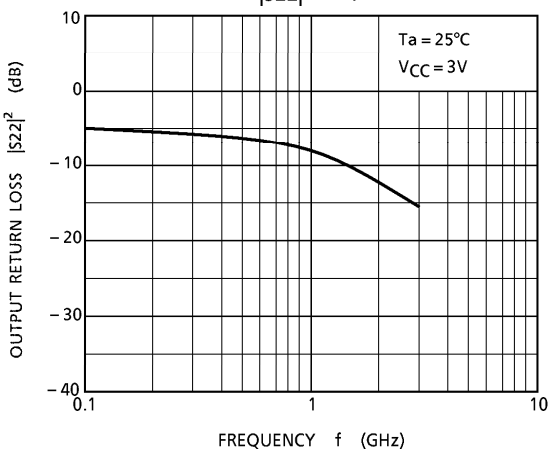
CHARACTERISTIC	SYMBOL	TEST CIR-CUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Circuit Current	I_{CC}	—	Non carrier	—	9	12	mA
Frequency Range	frange	—	—	1640	—	1700	MHz
Power Gain	Gp	1	f = 1640~1700MHz	8	11	14	dB
Noise Figure	NF	1		—	6	9	dB
Isolation	ISL	1		25	30	—	dB
Input VSWR	VSWRin	1		—	1.8	2.5	—
Output VSWR	VSWRout	1		—	1.9	2.5	—
Maxmum Output Power	P_O	1	f = 1640~1700MHz, Pin = −8dBmW	—	−3	—	dBmW

961001EBA2

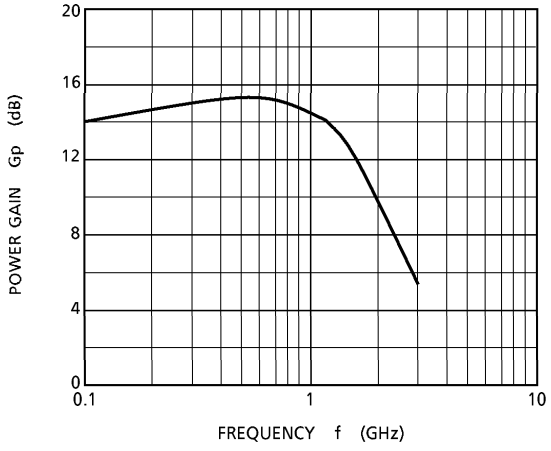
$|S11|^2$ – f



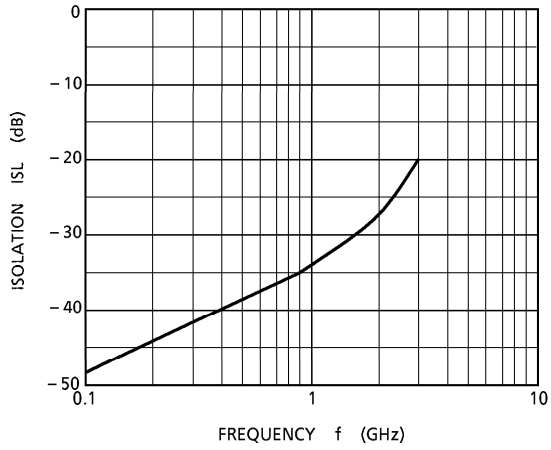
$|S22|^2$ – f



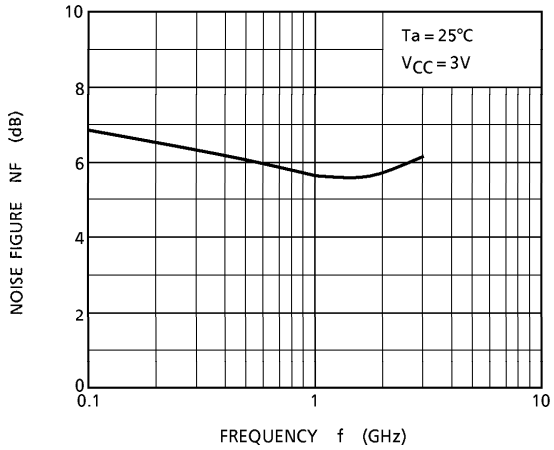
Gp – f



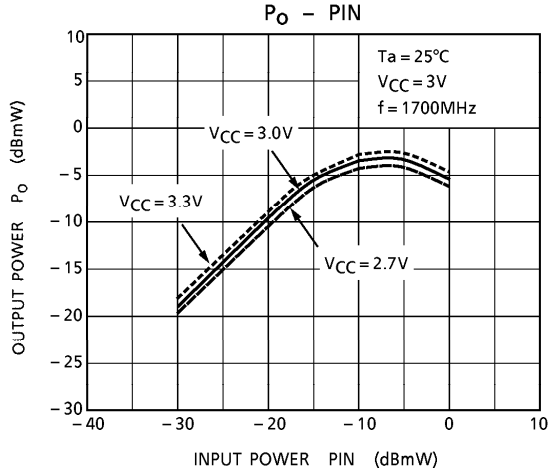
ISL – f



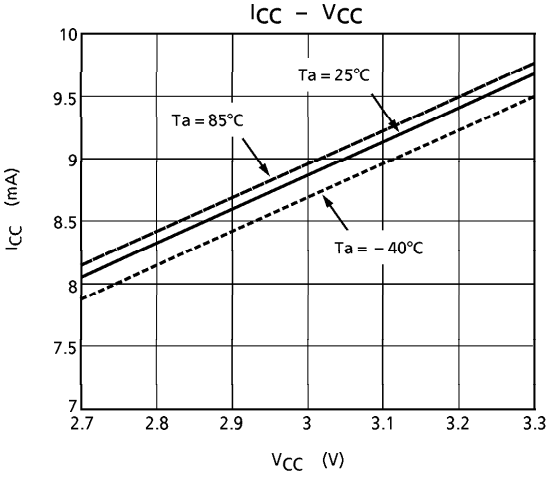
NF – f



P_O – PIN



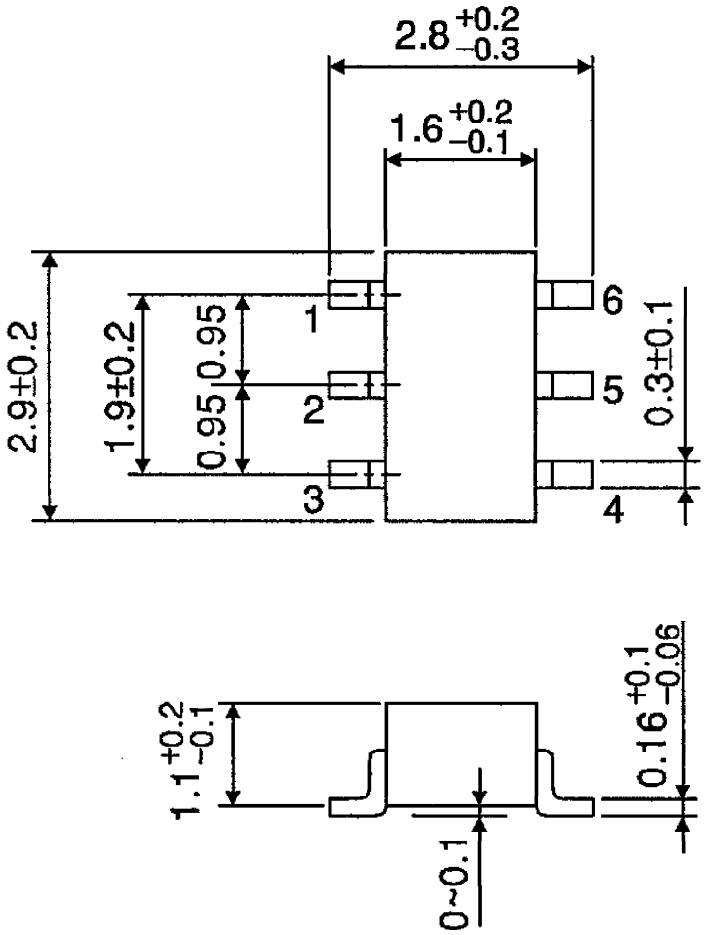
961001EBA2'


ICC – VCC
10
9.5
9
8.5
8
7.5
7
2.7
2.8
2.9
3
3.1
3.2
3.3
ICC (mA)
VCC (V)
Ta = 25°C
Ta = 85°C
Ta = – 40°C

OUTLINE DRAWING

SSOP6-P-0.95

Unit : mm



Weight : 0.014g (Typ.)