

TOSHIBA BIPOLAR LINEAR INTEGRATED CIRCUIT SILICON MONOLITHIC

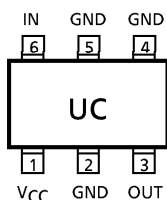
# TA4008F

## 1.6GHz BAND BUFFER AMPLIFIER APPLICATION

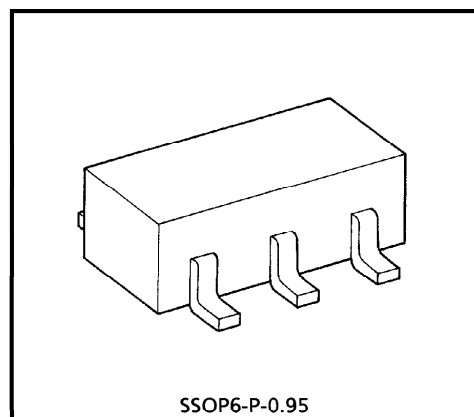
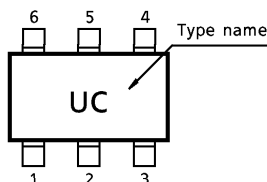
### FEATURES

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

### PIN ASSIGNMENT (TOP VIEW)



### MARKING

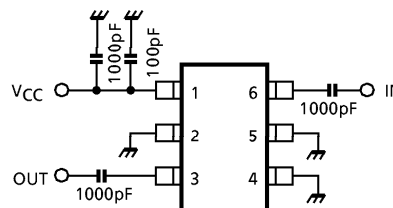


Weight : 0.014g (Typ.)

### 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

### TEST CIRCUIT 1



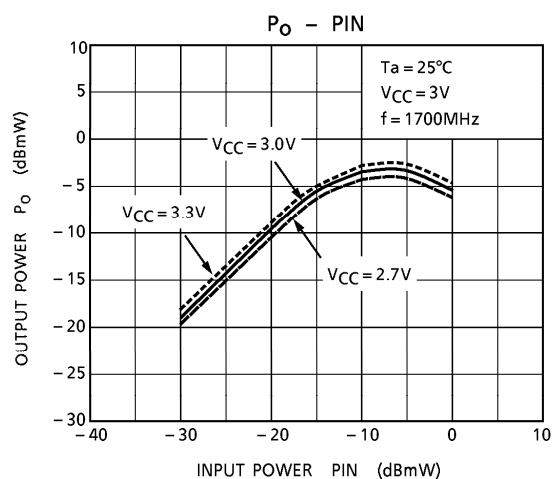
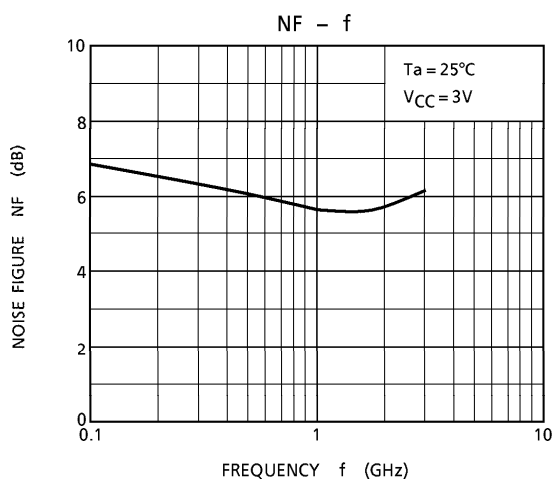
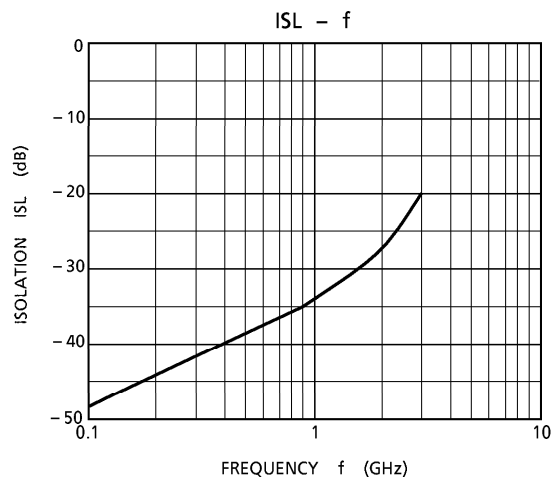
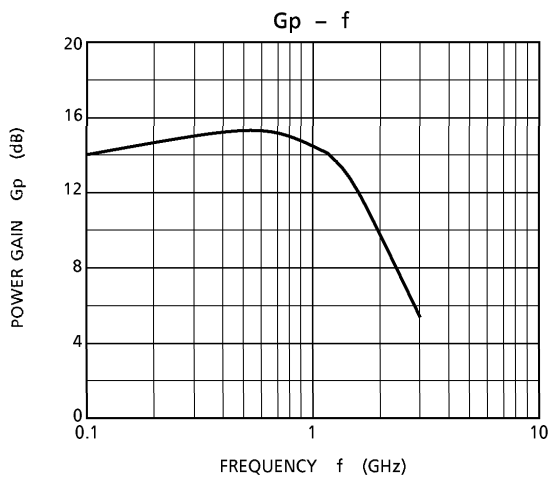
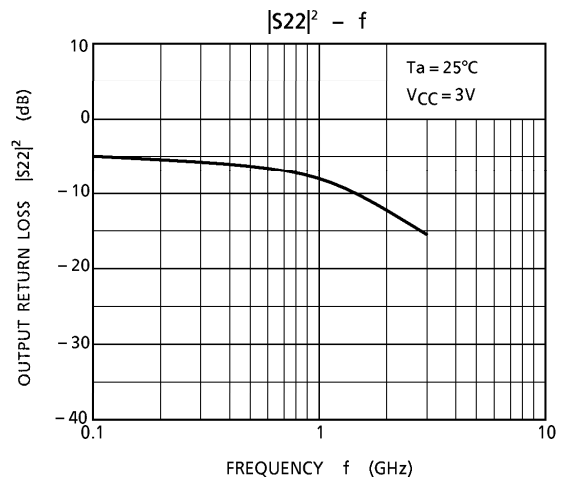
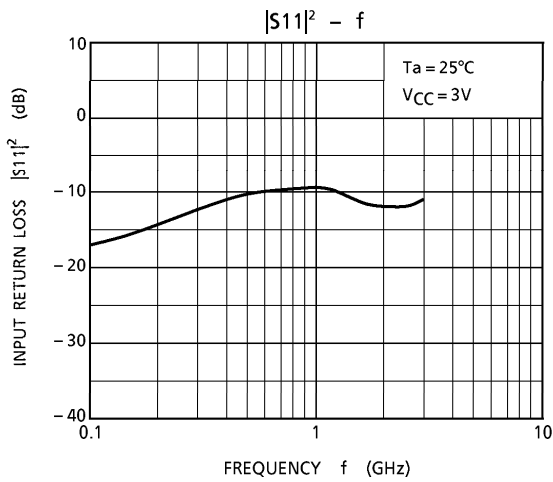
(\*) When mounted on the glass epoxy board of 2.5cm<sup>2</sup> × 1.6t.

### ELECTRICAL CHARACTERISTICS (V<sub>CC</sub> = 3V, Ta = 25°C, Z<sub>g</sub> = Z<sub>l</sub> = 50Ω)

CHARACTERISTIC	SYMBOL	TEST CIRCUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Circuit Current	$I_{CC}$	—	Non carrier	—	9	12	mA
Frequency Range	frange	—	—	1640	—	1700	MHz
Power Gain	$G_p$	1	f = 1640~1700MHz	8	11	14	dB
Noise Figure	NF	1		—	6	9	dB
Isolation	ISL	1		25	30	—	dB
Input VSWR	VSWR <sub>in</sub>	1		—	1.8	2.5	—
Output VSWR	VSWR <sub>out</sub>	1		—	1.9	2.5	—
Maxmum Output Power	$P_o$	1		f = 1640~1700MHz, Pin = -8dBmW	—	-3	—

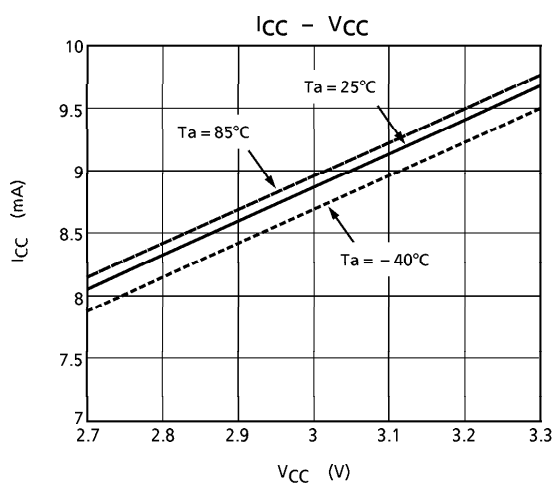
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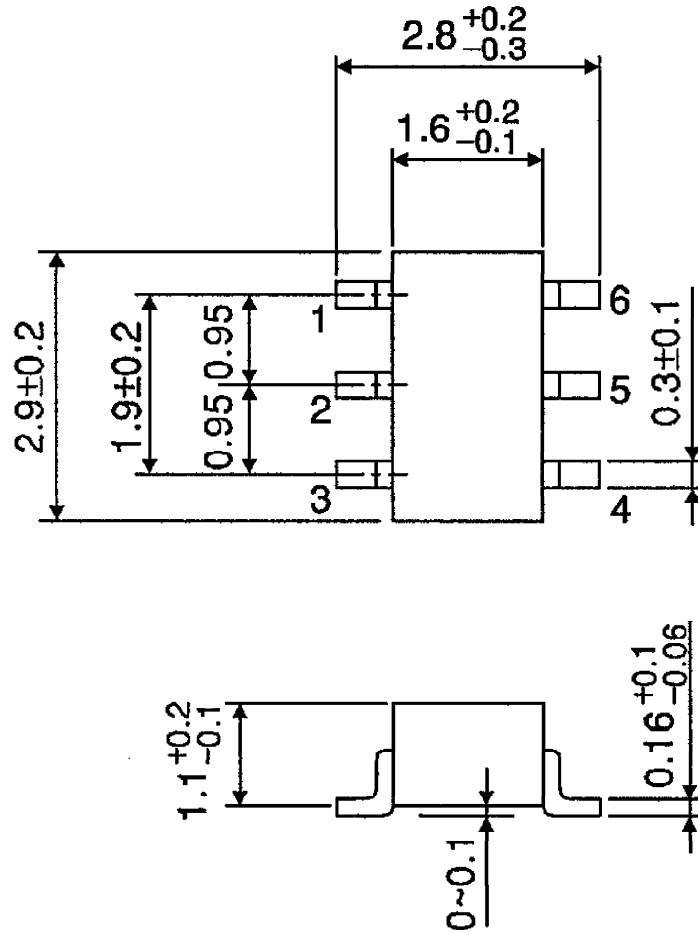
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OUTLINE DRAWING  
SSOP6-P-0.95

Unit : mm



Weight : 0.014g (Typ.)