

TOSHIBA BIPOLAR LINEAR INTEGRATED CIRCUIT SILICON MONOLITHIC

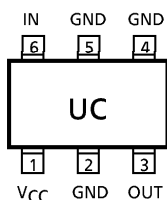
# TA4008F

## 1.6GHz BAND BUFFER AMPLIFIER APPLICATION

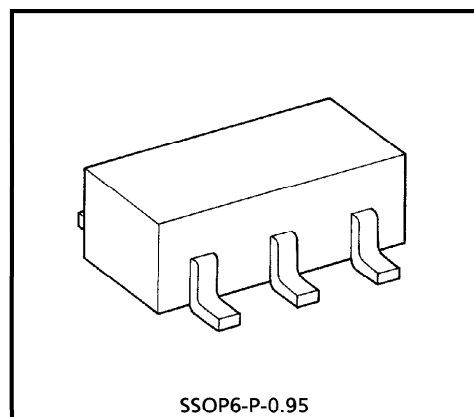
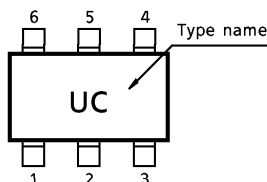
### FEATURES

- 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



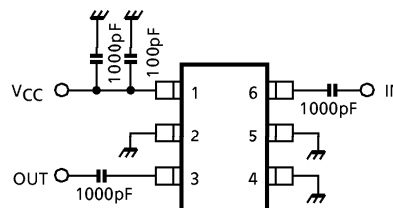
Weight : 0.014g (Typ.)

### 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

(\*) When mounted on the glass epoxy board of  $2.5\text{cm}^2 \times 1.6\text{t}$ .

### TEST CIRCUIT 1

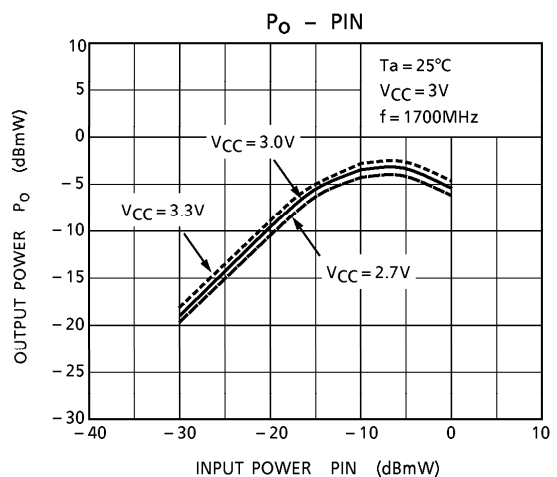
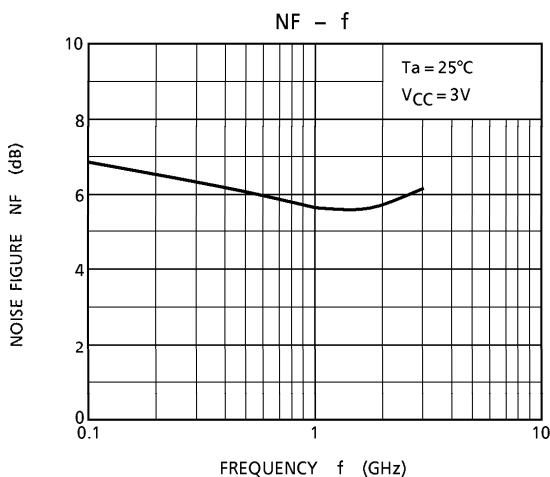
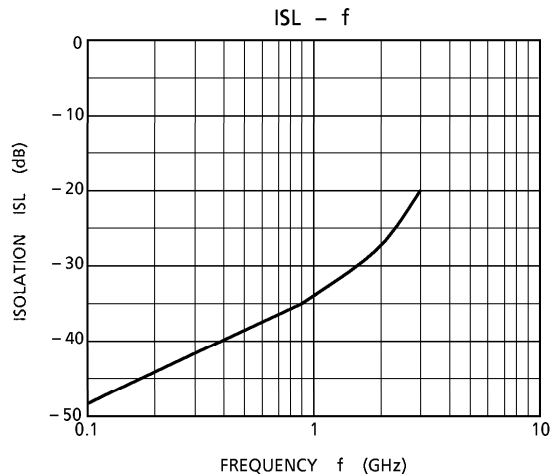
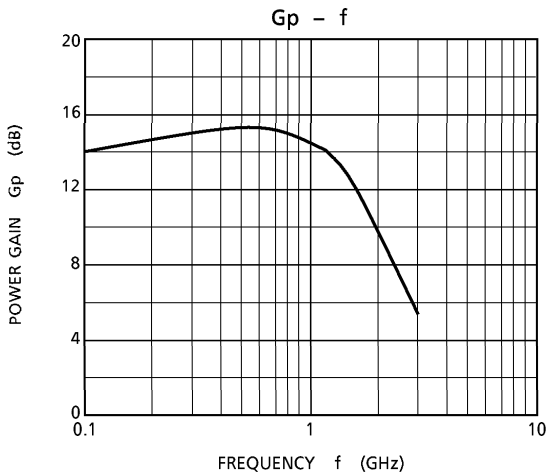
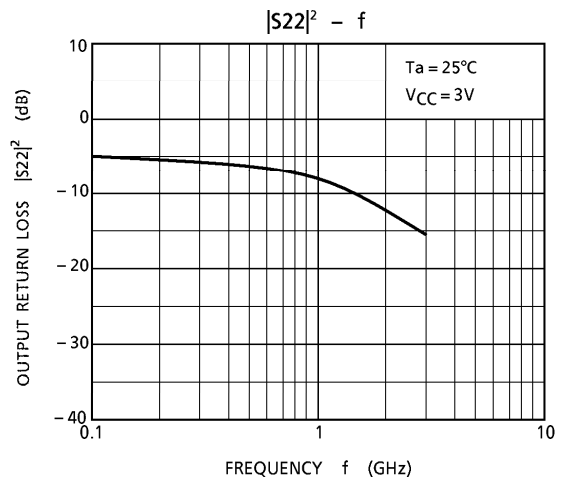
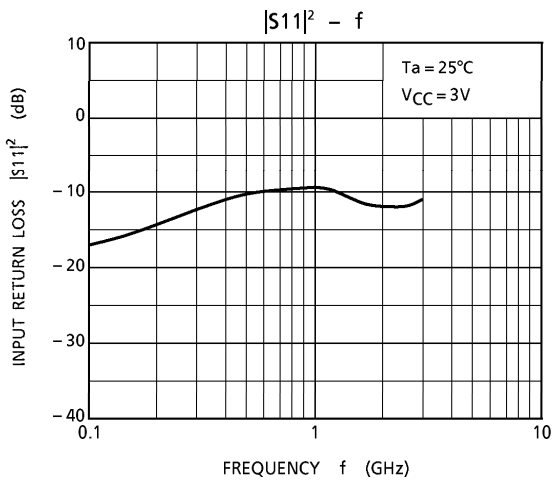


### ELECTRICAL CHARACTERISTICS ( $V_{CC} = 3\text{V}$ , $T_a = 25^\circ\text{C}$ , $Z_g = Z_l = 50\Omega$ )

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	$f = 1640\sim 1700\text{MHz}$	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	—
Maximum Output Power	$P_o$	1		$f = 1640\sim 1700\text{MHz}$ , $P_{in} = -8\text{dBmW}$	—	-3	—

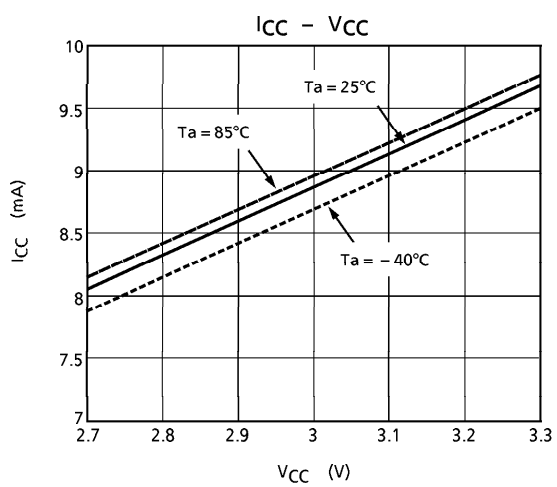
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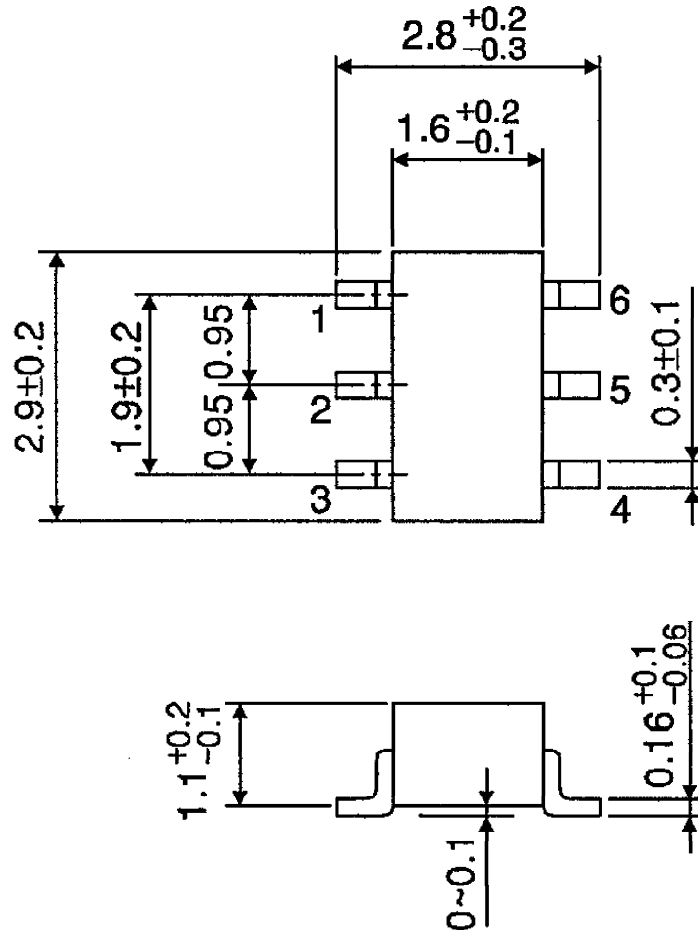
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OUTLINE DRAWING  
SSOP6-P-0.95

Unit : mm



Weight : 0.014g (Typ.)