

TOSHIBA BIPOLAR LINEAR INTEGRATED CIRCUIT SILICON MONOLITHIC

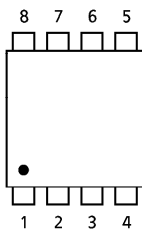
TA4101F

UHF VHF MIX APPLICATION

FEATURES

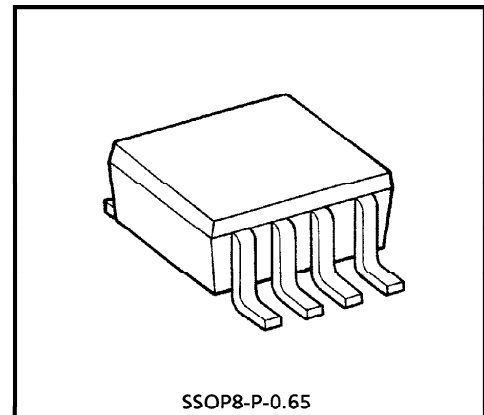
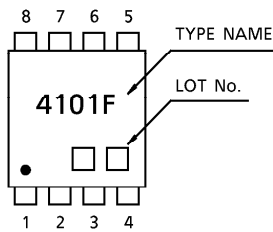
- Double Balance circuit

PIN ASSIGNMENT (TOP VIEW)



- 1. IF OUT
- 2. V_{CC}
- 3. OSC IN
- 4. Base
- 5. Base
- 6. Base
- 7. GND
- 8. Collector

MARKING



Weight : 0.02g (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 the glass epoxy board of 2.5cm² × 1.6t

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

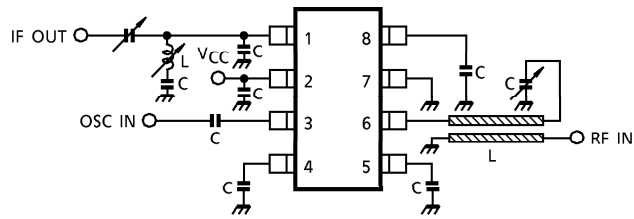
CHARACTERISTIC	SYMBOL	TEST CIR-CUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Circuit Current	I _{CC}	—	V _{CC} = 5V	3.9	5.7	7.5	mA
MIXER Gain	G _{MIX}	1	V _{CC} = 5V, (*)	- 6.0	- 3.5	—	dB
MIXER NOISE Figure	NF _{MIX}	1	V _{CC} = 5V, (*)	—	9.0	12.0	dB
Maximum Output Level	P _o	1	V _{CC} = 5V, (*)	- 12	- 9	—	dBmW

(*) : f_{RF} = 800MHz, f_{LO} = 860MHz (0dBm), I_F = 60MHz

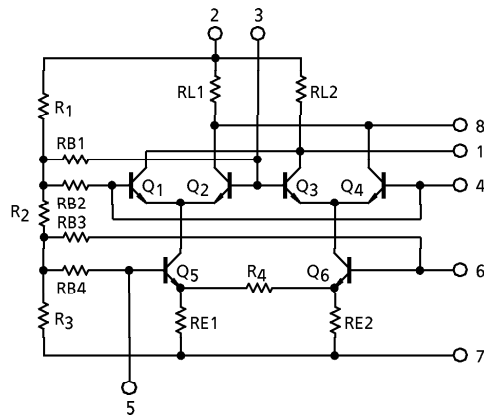
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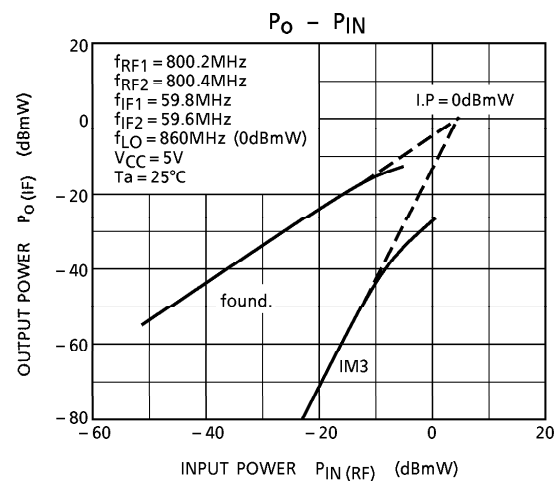
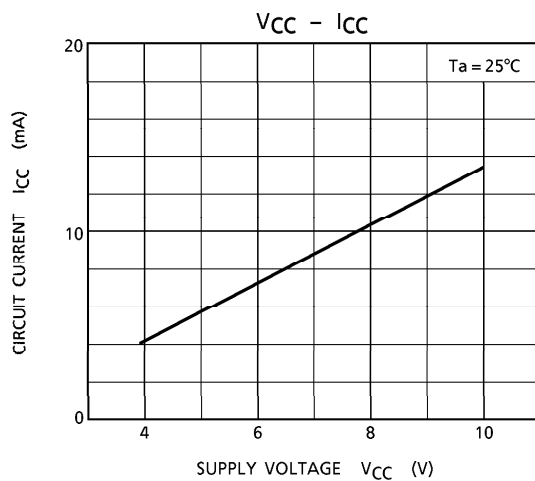
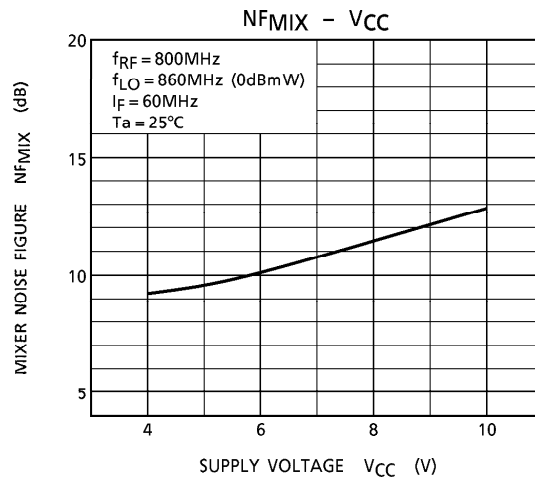
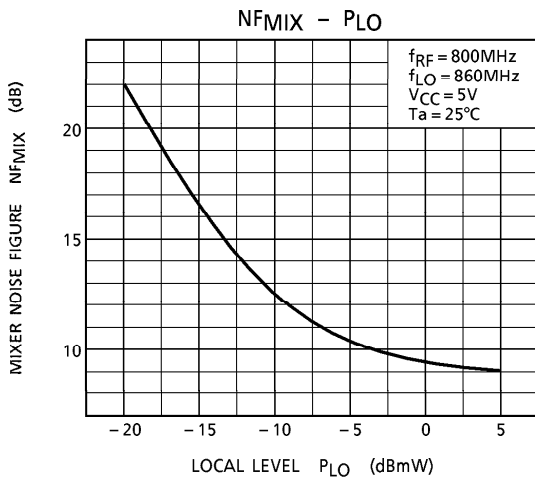
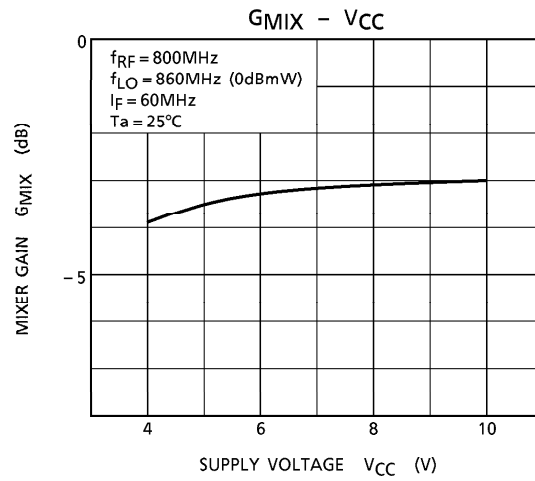
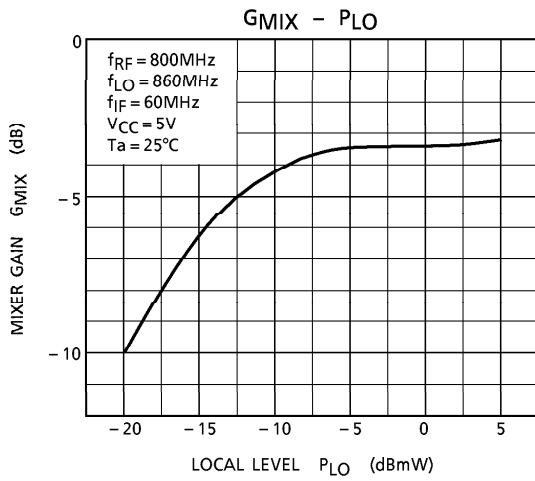
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MEASUREMENT CIRCUIT 1.



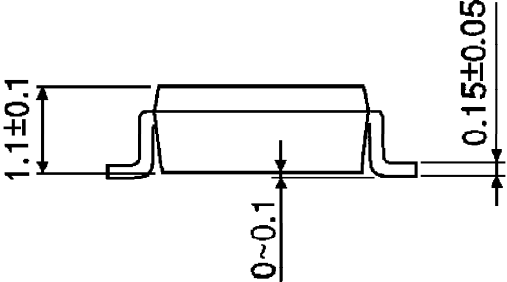
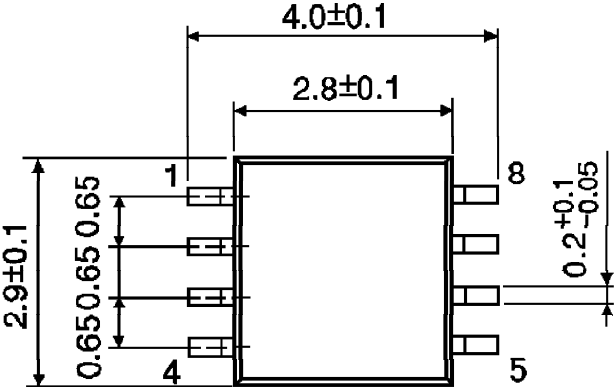
EQUIVALENT CIRCUIT





OUTLINE DRAWING
SSOP8-P-0.65

Unit : mm



Weight : 0.02g (Typ.)