

TENTATIVE

TOSHIBA GaAs LINEAR INTEGRATED CIRCUIT GaAs MONOLITHIC

TG2006F

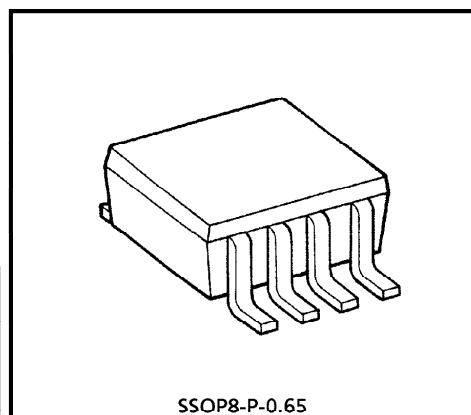
1.9GHz POWER AMP

FEATURES

- $V_{DD} = 3V$, $I_{DD} = 130mA$ (Typ.)
- $P_O = 21dBmW$ (Min), $G_p = 22dB$ (Typ.)
- Single voltage supply

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Supply Voltage	V_{DD}	5	V
	V_{GG}	3	V
Input Power	P_i	10	mW
Power Dissipation	P_d (*)	250	mW
Operating Temperature Range	T_{opr}	-40~85	°C
Storage Temperature Range	T_{stg}	-55~150	°C



Weight : 0.02g (Typ.)

P_d (*) When mounted on 2.5cm² x 1.6t glass epoxy board.
 $V_{DD} = V_{DD1} = V_{DD2}$

ELECTRICAL CHARACTERISTICS ($V_{DD} = 3V$, $I_{DD} = 130mA$ (Note 1), 1/8 duty operation) (f = 1.9GHz, Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CIR-CUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Output Power	P_O	—	$P_i = 1dBmW$	21	—	—	dBmW
Small Signal Gain	G_p	—	—	20	22	—	dB
Adjacent Channel Leakage Power Ratio	P_{adj}	—	$P_O = 21dBmW$, $P_i = \text{Regulation}$ $\Delta f = 600kHz$ (Note 2)	—	—	-55	dB
Gate Current	I_{GG}	—	$P_O = 21dBmW$, $P_i = \text{Regulation}$	—	—	-1	mA

$I_{DD} = I_{DD1} + I_{DD2}$

Specification when an external match circuit is connected at output.

(Note 1) Value obtained by adjusting (0 to 3V) V_{GG} when 21dBmW is output.

(Note 2) Input signal is modulated to π / GQPSK ($\alpha = 0.5$). Bit rate is 384kbps.

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The diagram shows a rectangular product label with two main sections. The top section is labeled 'Product number' and contains four small boxes with the numbers 8, 7, 6, and 5. The bottom section is labeled 'Monthly lot' and contains the text '2006 F' followed by two small empty boxes. Below the label, there are four more boxes with the numbers 1, 2, 3, and 4.

Legend:

Length	Width	Unit
10.0	0.7	mm
4.0	0.7	mm
1.0	0.7	mm
2.7	0.3	mm
7.0	0.7	mm
2.4	0.3	mm
13.0	0.7	mm
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TG2006F RF TEST BOARD

