

TENTATIVE

TOSHIBA GaAs LINEAR INTEGRATED CIRCUIT GaAs MONOLITHIC

TG2006F

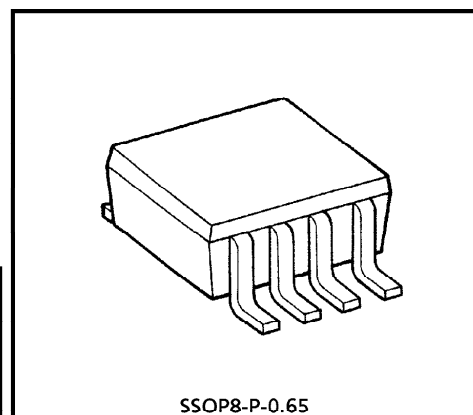
1.9GHz POWER AMP

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.

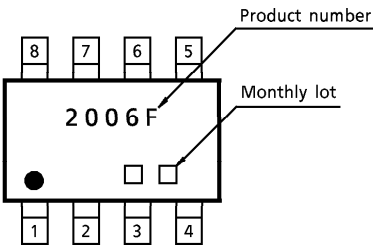
(Note 1) Value obtained by adjusting (0 to 3V) V_{GG} when 21dBmW is output.

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

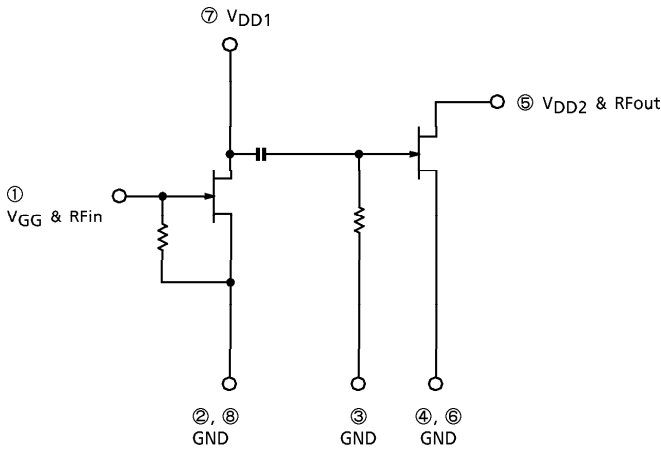
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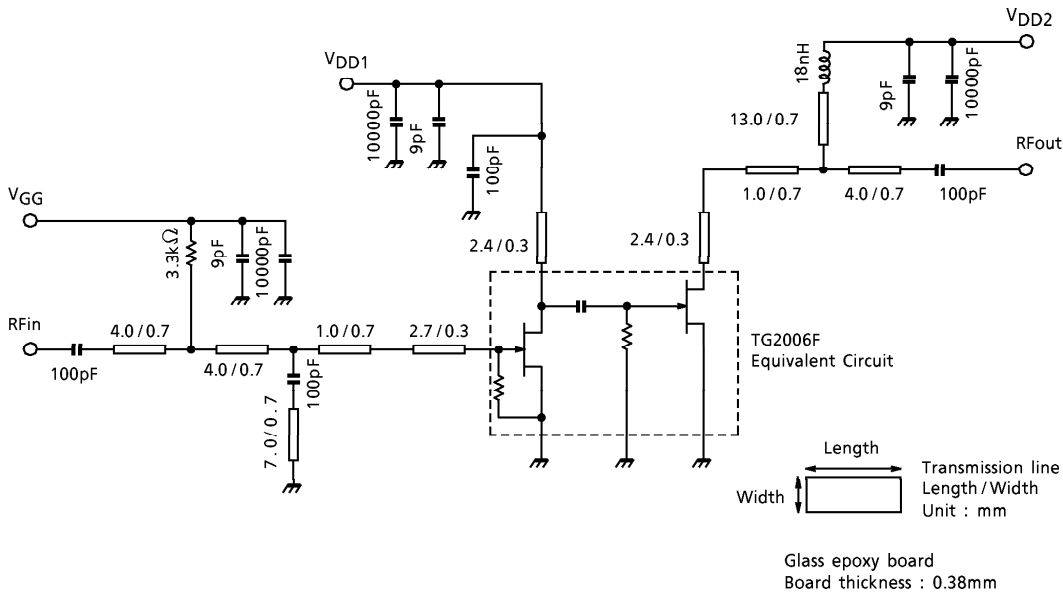
MARKING



EQUIVALENT CIRCUIT



RF TEST CIRCUIT



TG2006F RF TEST BOARD

