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Renesas Electronics website: <http://www.renesas.com>

April 1st, 2010
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (<http://www.renesas.com>)

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Evaluation Board Information

μ PC8178TB

2.4 GHz Silicon MMIC Evaluation Board

- **Evaluation Board Pattern Layout**
- **Circuit Description**
- **Circuit Current and Power Gain Data**
- **1 dB Gain Compression Output Power Data**
- **Isolation Data**
- **Input and Output Return Loss Data**

For the purposes of maintaining up-to-date information, the contents of this document are subject to change without notice.

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The characteristics of high-frequency devices in particular vary depending on the external components and mounting pattern used.

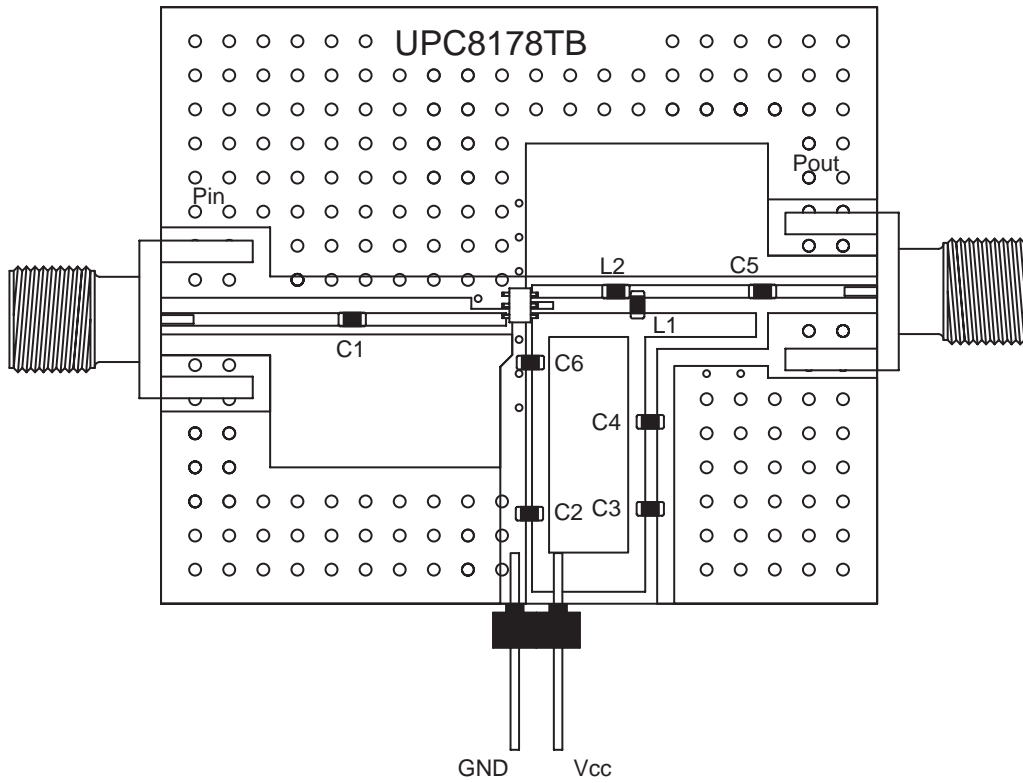
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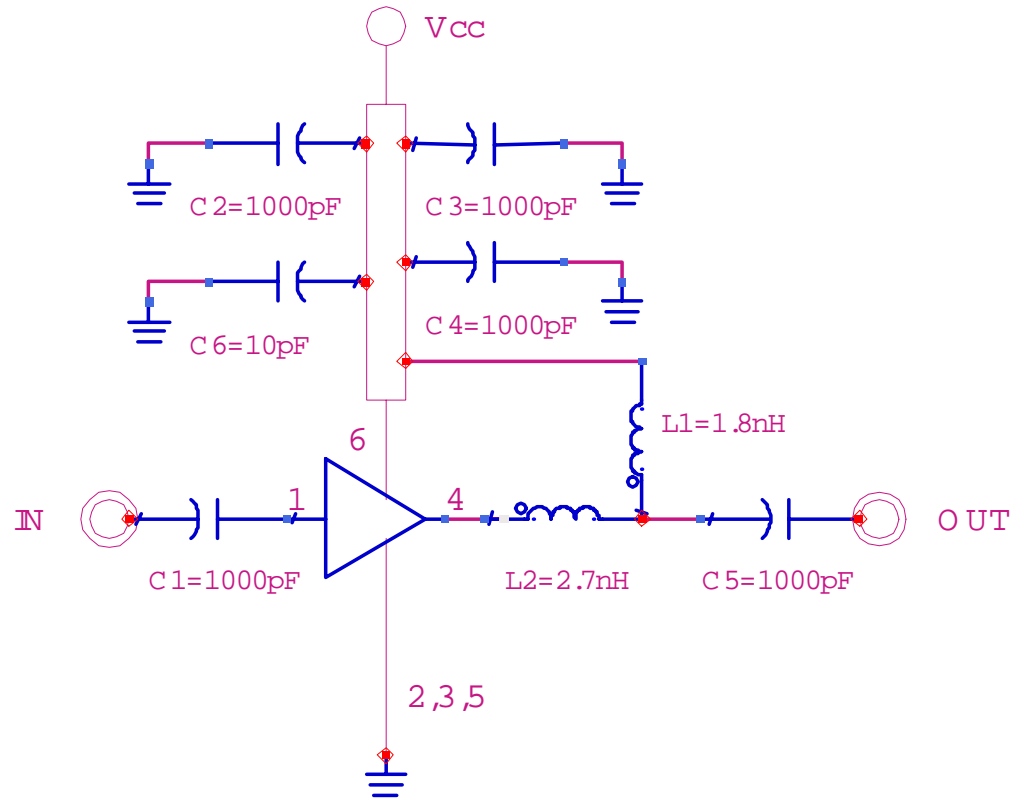
Evaluation Board Pattern Layout

uPC8178TB $f = 2.4 \text{ GHz}$



Circuit Description

uPC 8178TB $f = 2.4 \text{ GHz}$



KC-8178TB**@ f = 2.4 GHz, V_{CC} = 3.0 V**

Symbol	I _{CC}	G _P	P _{O(1 dB)}	ISL	RL _{in}	RL _{out}
Unit	mA	dB	dBm	dB	dB	dB
Conditions	No signal	P _{in} = -30 dBm	—	P _{in} = -30 dBm	P _{in} = -30 dBm	P _{in} = -30 dBm
TYP.	1.90	11.5	-7.5	38.0	9.5	—
1	1.77	10.7	-8.4	37.9	9.1	10.7
2	1.76	10.6	-8.3	38.1	9.1	10.6
3	1.78	10.6	-8.3	40.0	9.0	9.5
4	1.76	10.7	-8.2	38.4	8.3	12.0
5	1.79	10.7	-8.1	38.2	9.0	11.8
AVE.	1.79	10.8	-8.1	38.4	9.0	10.9

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