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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 PC8179TB

1.0 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**

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

Customers are requested to confirm all characteristics when designing a system based in part or wholly on the information in this document.

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(Note)

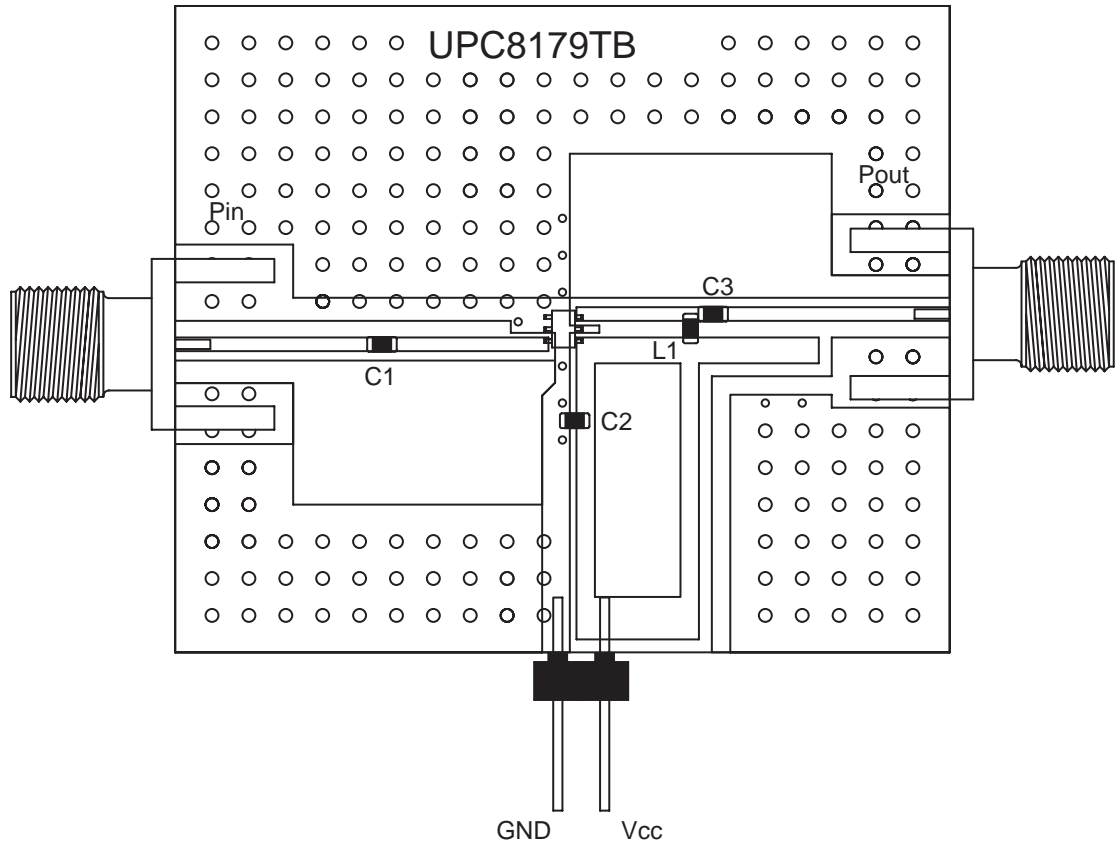
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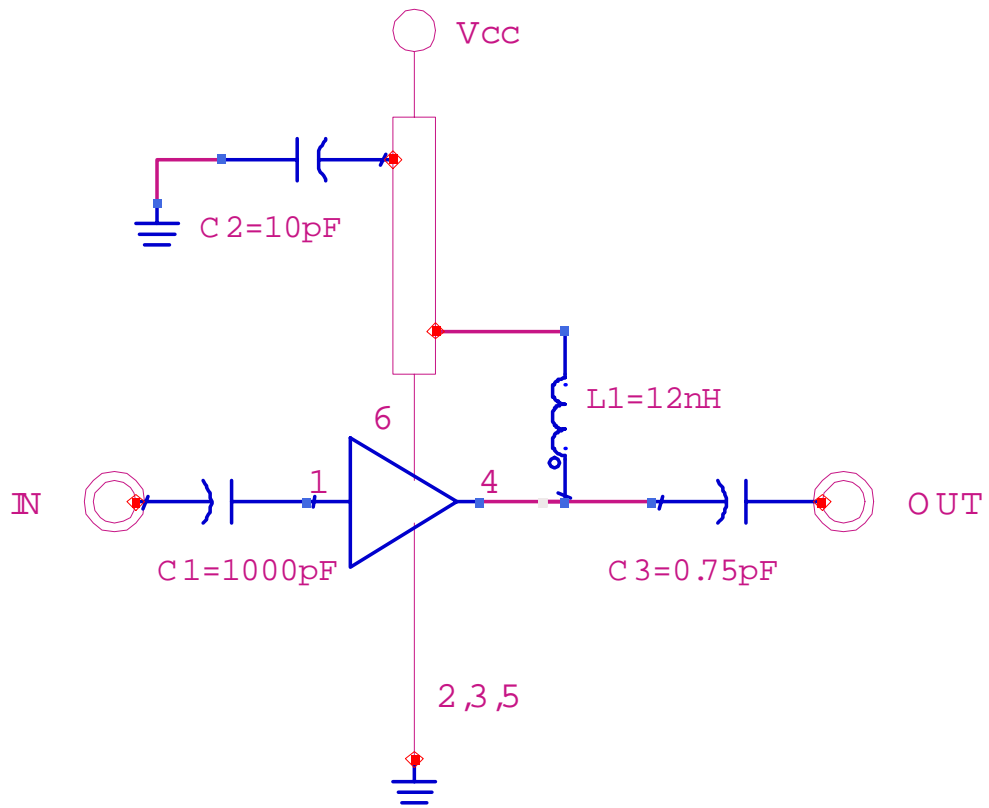
Evaluation Board Pattern Layout

uPC8179TB $f = 1.0 \text{ GHz}$



Circuit Description

uPC 8179TB $f=1.0\text{GHz}$



KC-8179TB**@ f = 1.0 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.	4.00	13.5	3.0	44.0	7.0	—
1	3.85	13.6	1.3	42.6	6.5	16.2
2	3.86	13.6	1.5	41.6	6.5	16.9
3	3.79	13.4	1.3	43.7	6.2	16.2
4	3.84	13.2	1.6	43.7	6.3	21.5
5	3.85	13.5	1.0	42.1	6.2	15.2
AVE.	3.84	13.4	1.3	42.7	6.3	17.2

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