

To our customers,

Old Company Name in Catalogs and Other Documents

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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

EC- μ PC3224TB **Wideband Amplifier** **(For DBS LNB) Evaluation Board**

- **Evaluation Board Pattern Layout**
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- **2.15 GHz 2nd/3rd Harmonics vs. P_{in}**

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This document outlines general applications for this product. The application circuits and circuit constants provided in this document are simply examples and should not be used for mass production design. Be aware also that there is no intention to standardize the restrictions and characteristics of these application circuits.

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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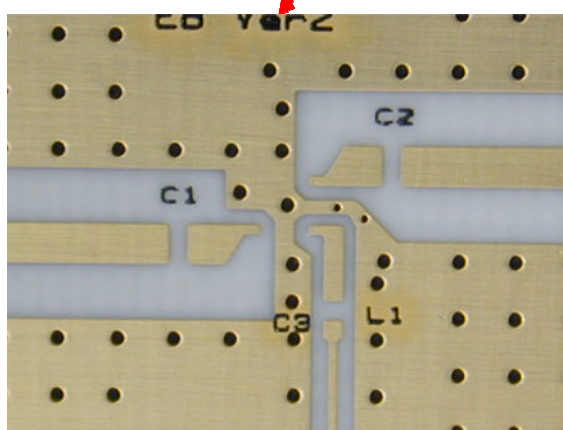
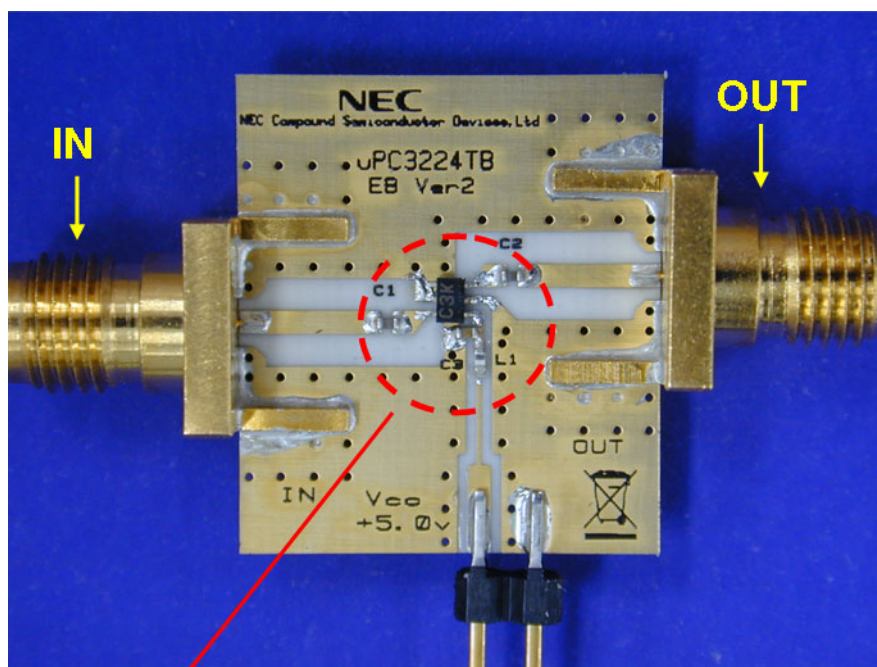
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Evaluation Board Pattern Layout

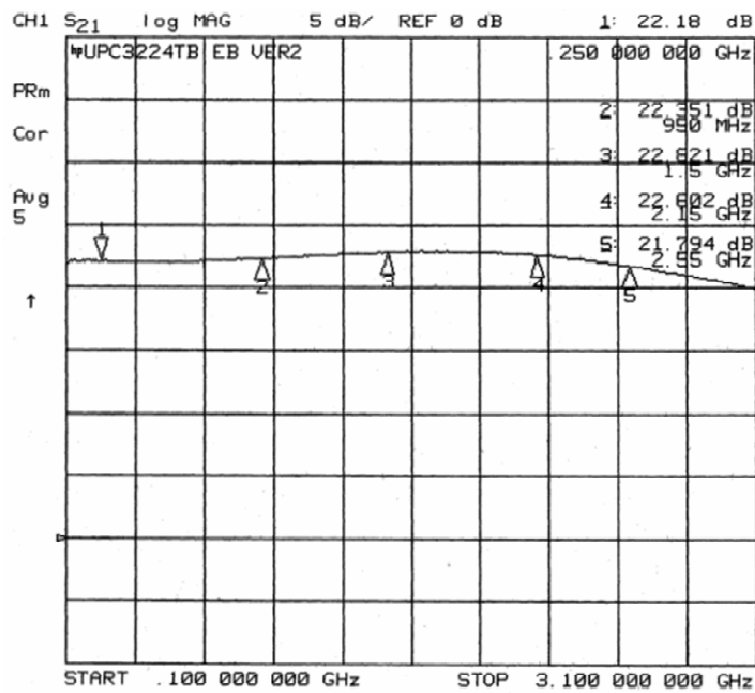


size 19 mm × 21.46 mm

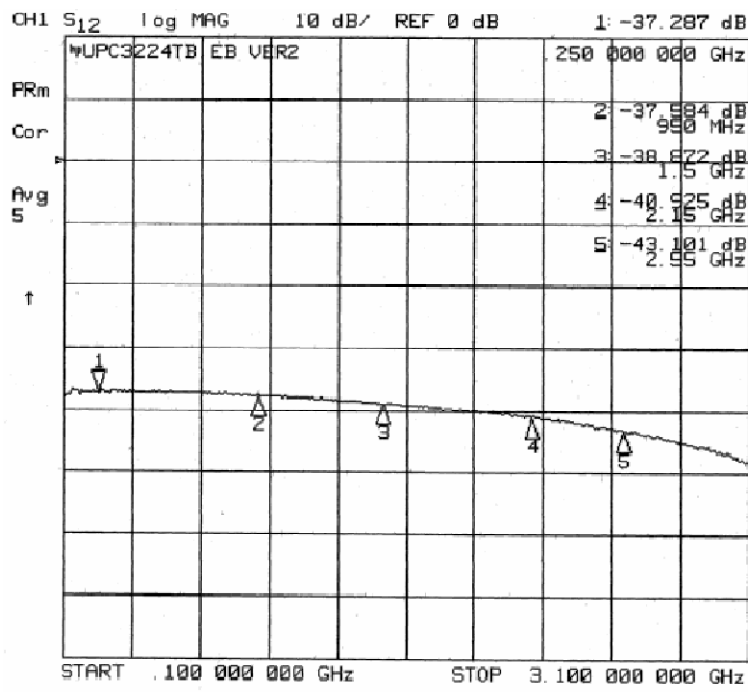
substrate RO4003 (Rogers)
t = 0.51 mm, $\epsilon_r = 3.38$

Parts	Model No.	Value	Maker	Symbol
Chip Capacitance	GRM1552C1H101JZ01	100 pF	Murata	C1, C2
	GRM155B11H102KA01	1 000 pF	Murata	C3
Chip Inductor	AML1005H68NJT	68 nH	FDK	L1
PC Terminal	A2-2PA-2.54DSA	—	Hirose	—
RF Connector	WK72475	—	Waka	—
Substrate	RO4003 (t = 0.51 mm)	—	Rogers	—

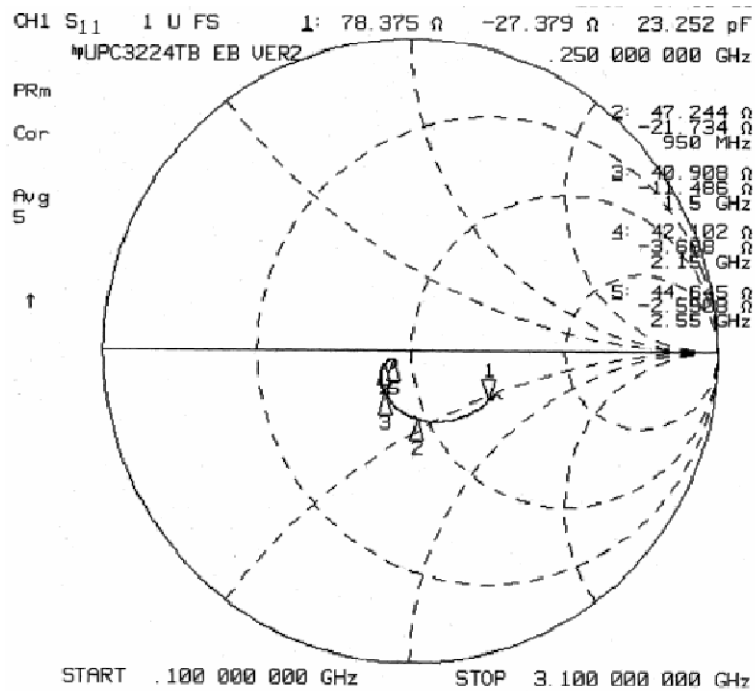
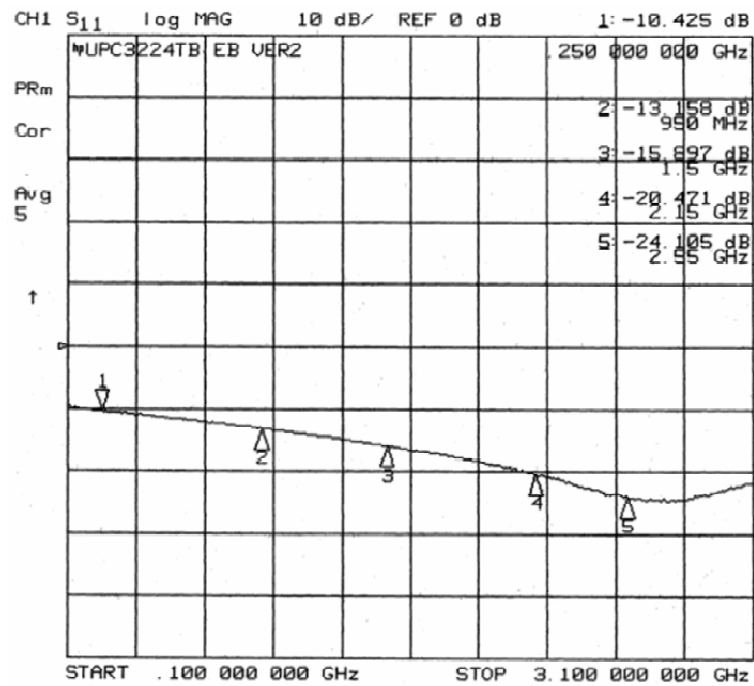
Power Gain Data



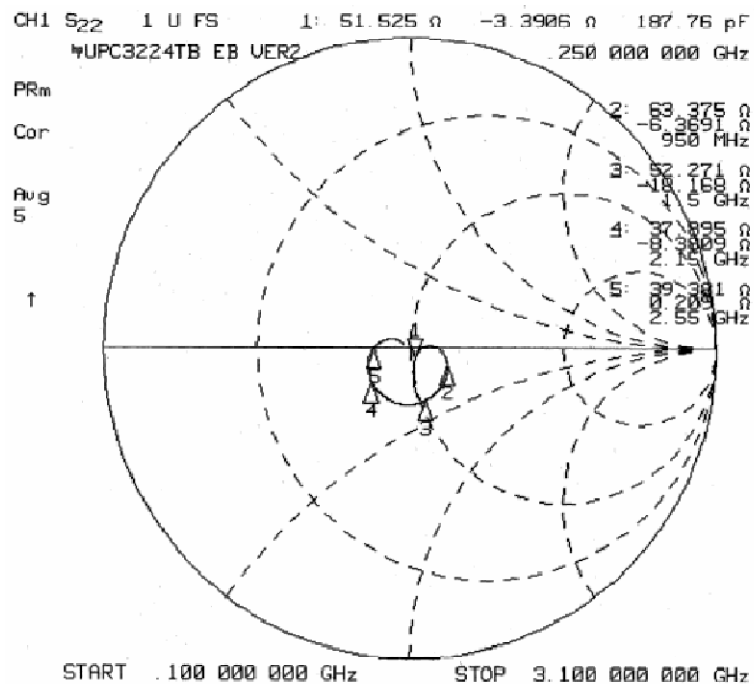
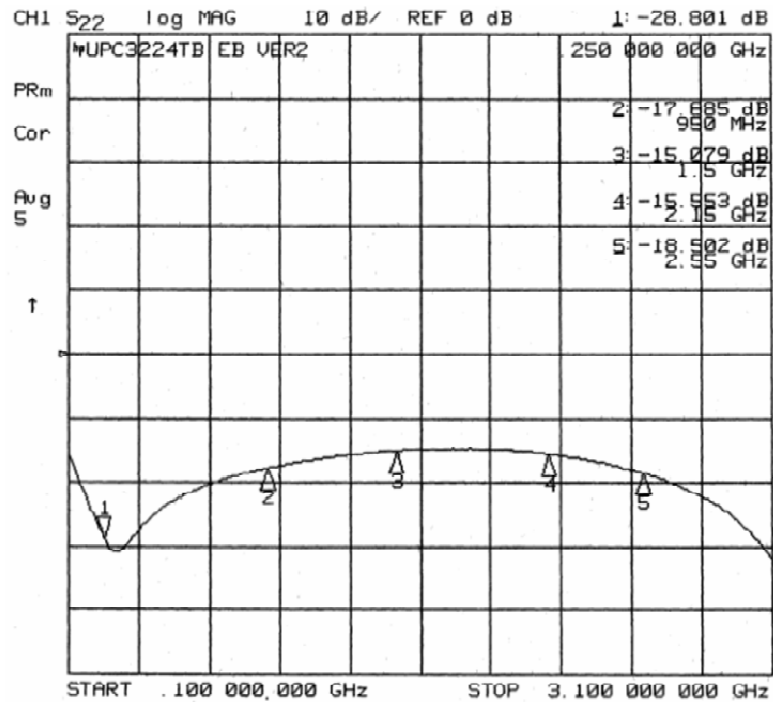
Isolation Data



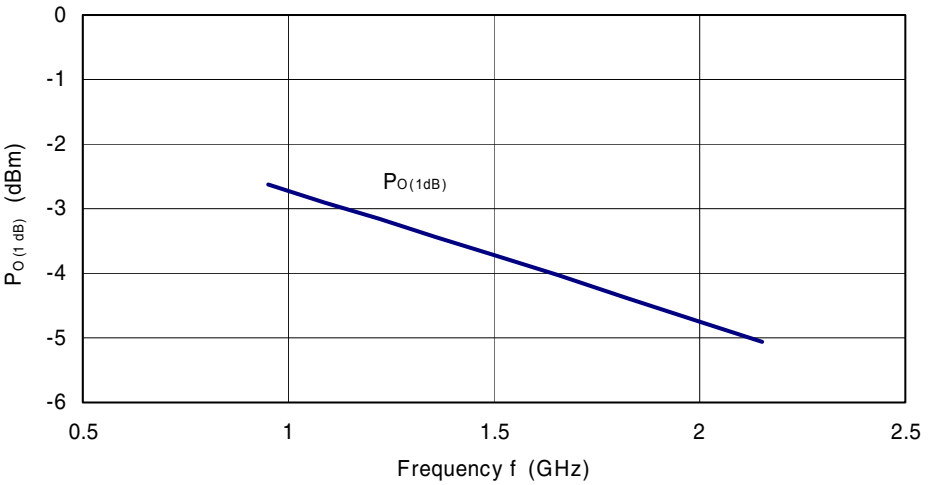
Input Return Loss Data



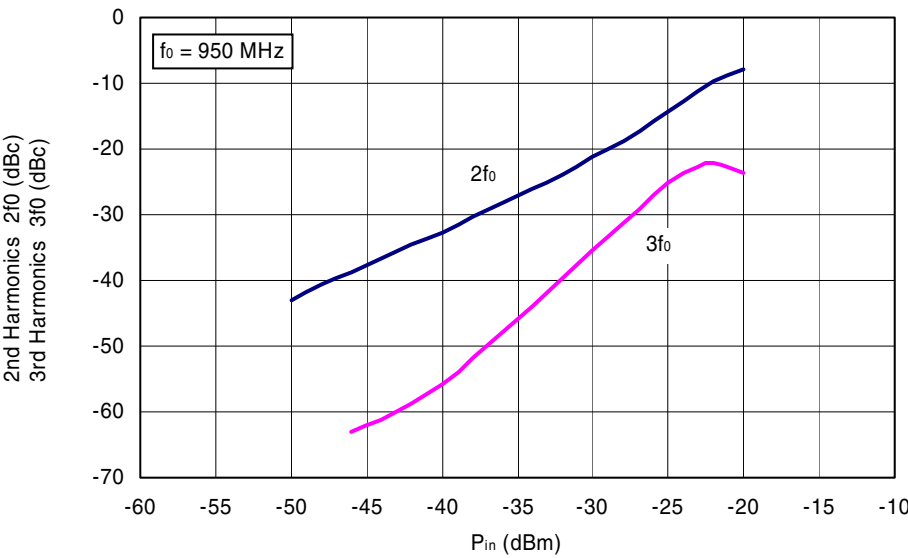
Output Return Loss Data



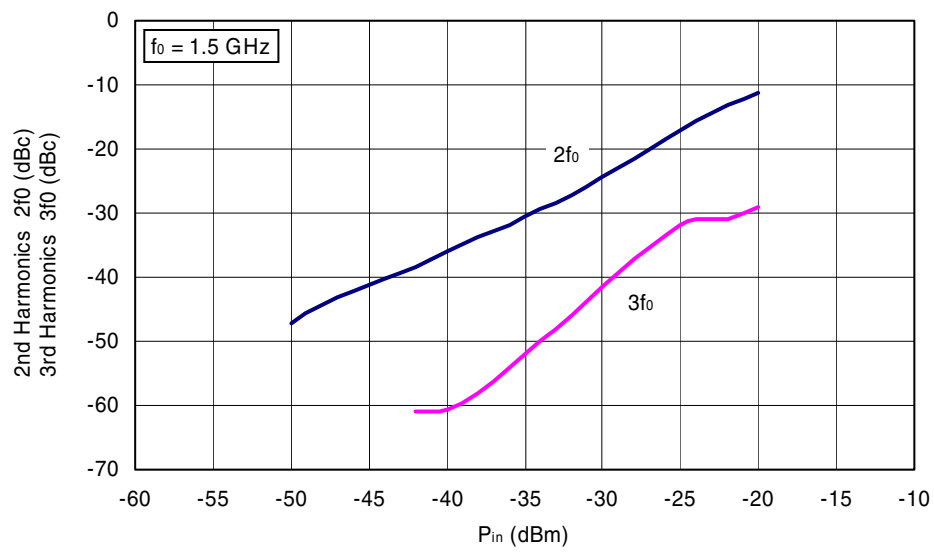
P_O (1 dB) vs. Frequency



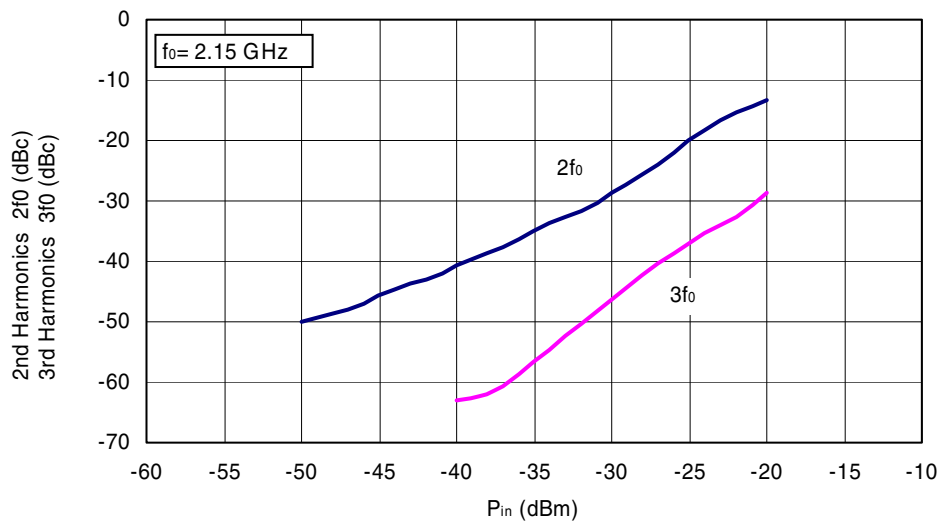
950 MHz 2nd/3rd Harmonics vs. P_{in}



1.5 GHz 2nd/3rd Harmonics vs. P_{in}



2.15 GHz 2nd/3rd Harmonics vs. P_{in}



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