

ADIC210LP5

V0

性能特点

- 频率范围: 2 GHz - 20 GHz
- 小信号增益: 18 dB
- 噪声系数: 2.5 dB
- P1dB: 16 dBm @ 10 GHz
- 直流供电: $V_d=5\text{ V}$ @ $I_d=66\text{ mA}$
- 封装尺寸: QFN 5×5×0.75 mm
- 同脚替代型号: HMC462LP5

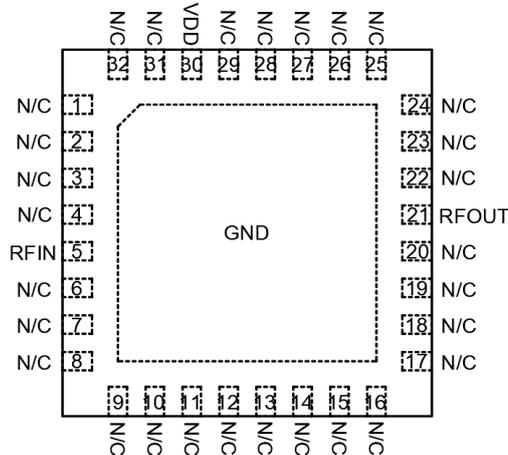
产品简介

ADIC210LP5是一款超宽带低噪声放大器, 频率范围覆盖2 - 20 GHz, 功率增益18 dB, 输出1dB压缩点输出功率16 dBm @ 10 GHz, 并有较低的噪声系数, 可与国外产品进行Pin-To-Pin替换, 通过5 V单电源供电。可广泛应用于RF/微波电路、测试测量、仪表仪器、雷达和电子对抗等。

极限参数

漏极电压Vdd	+8 V
输入功率 (50 Ω 负载)	+10 dBm
烧结温度 (30s)	260 °C
工作温度	-55 °C~+85 °C
储存温度	-65 °C~+150 °C
静电防护等级 (ESD)	Class 1B (HBM)

外形尺寸



俯视透视图

引脚定义

编号	符号	功能描述
5	RFin	射频信号输入端, 外接50欧姆系统
21	RFout	射频信号输出端, 外接50欧姆系统
30	Vd	漏极电压馈电端, 需外置0.01 uF旁路电容
其他	N/C	-



关注公众号



ELECTROSTATIC SENSITIVE DEVICE
OBSERVE HANDLING PRECAUTIONS

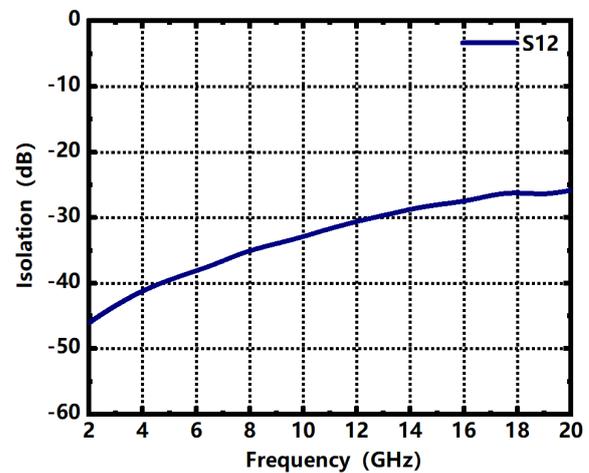
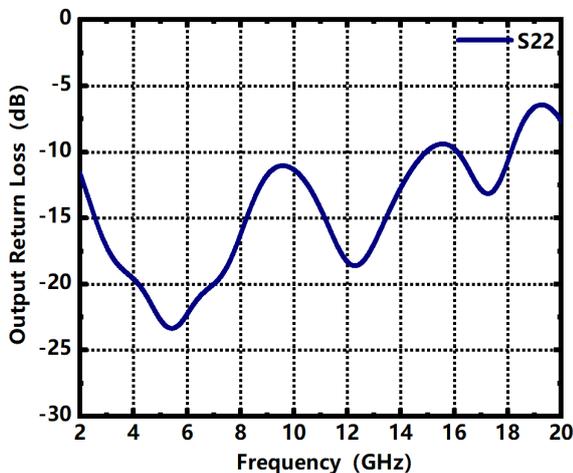
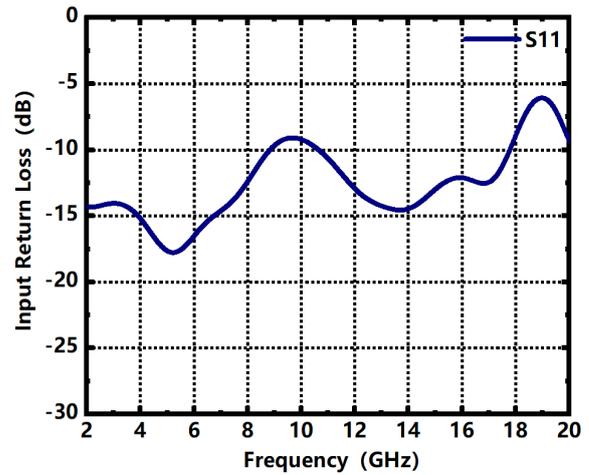
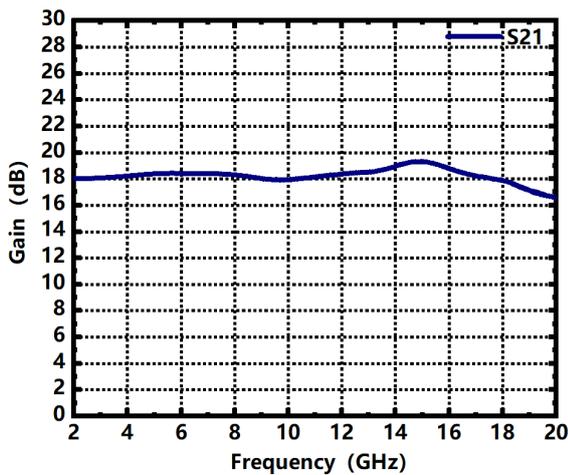
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电性能表 ($T_A = +25\text{ }^\circ\text{C}$, $V_d = 5\text{ V}$, $I_d = 66\text{ mA}$)

参数名称	最小值	典型值	最大值	单位
频率范围	2	-	20	GHz
小信号增益	16	18	-	dB
增益平坦度	-	± 1	-	dB
噪声系数	-	2.5	-	dB
P1dB	-	16	-	dBm
输入回波损耗	-7	-13	-	dB
输出回波损耗	-7	-15	-	dB
静态电流	-	66	-	mA

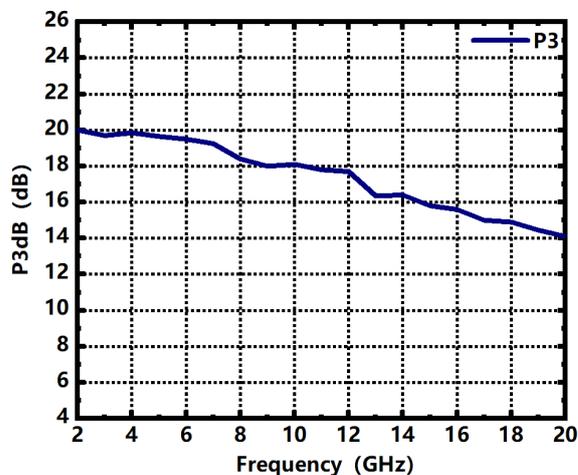
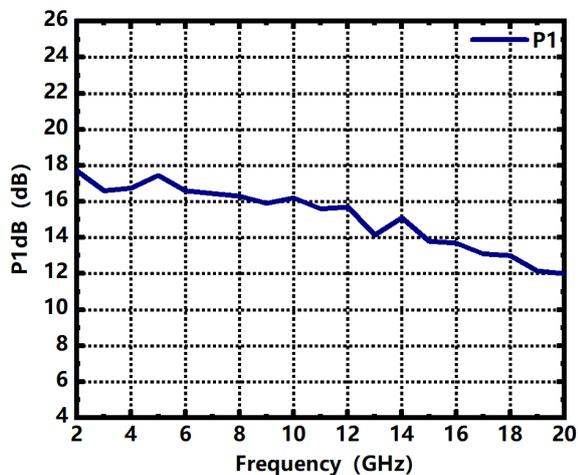
典型测试曲线 ($T_A = +25\text{ }^\circ\text{C}$, $V_d = 5\text{ V}$, $I_d = 66\text{ mA}$)



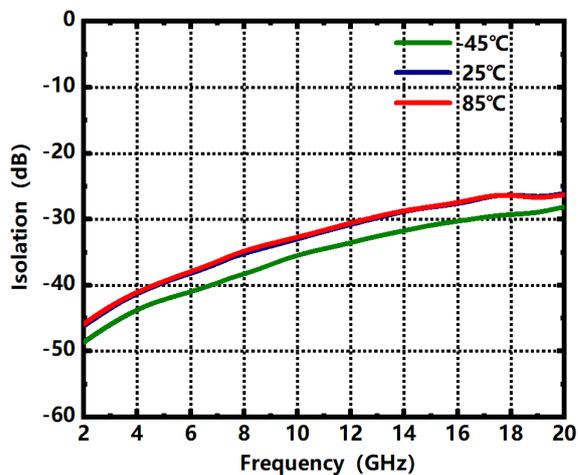
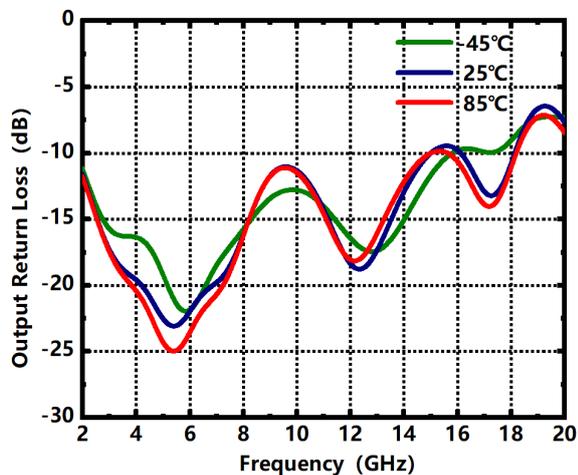
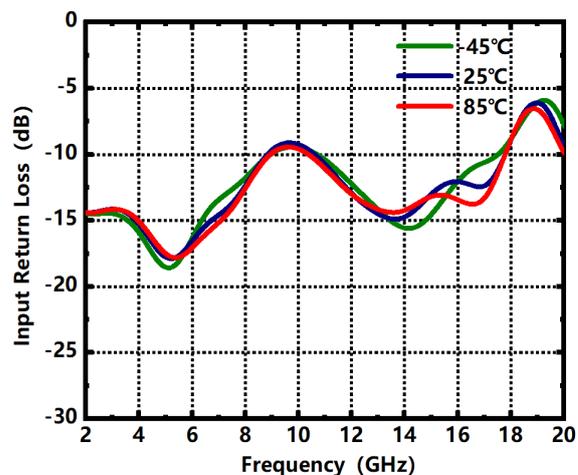
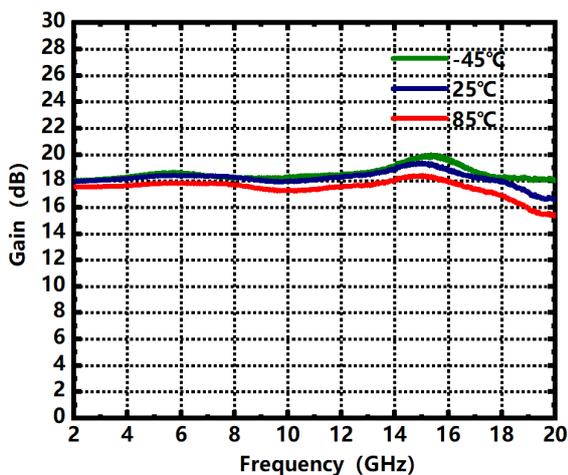
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典型测试曲线 ($T_A = +25^\circ\text{C}$, $V_d = 5\text{ V}$, $I_d = 66\text{ mA}$)



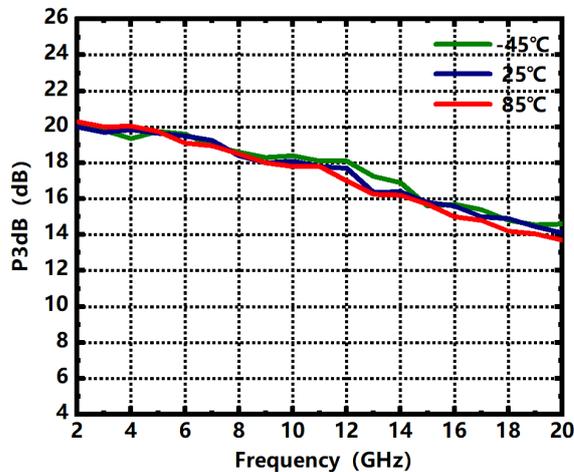
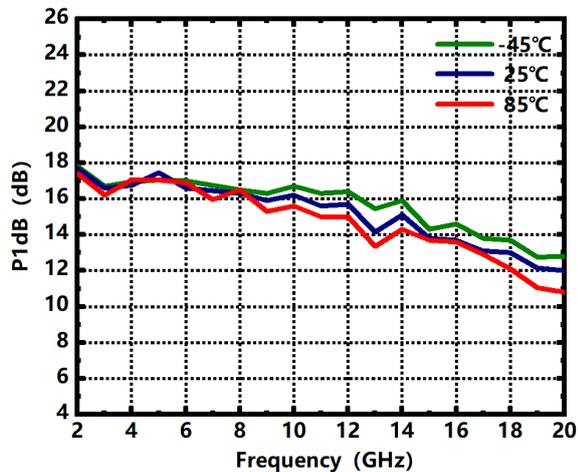
典型测试曲线 (50Ω系统, 高低温测试)



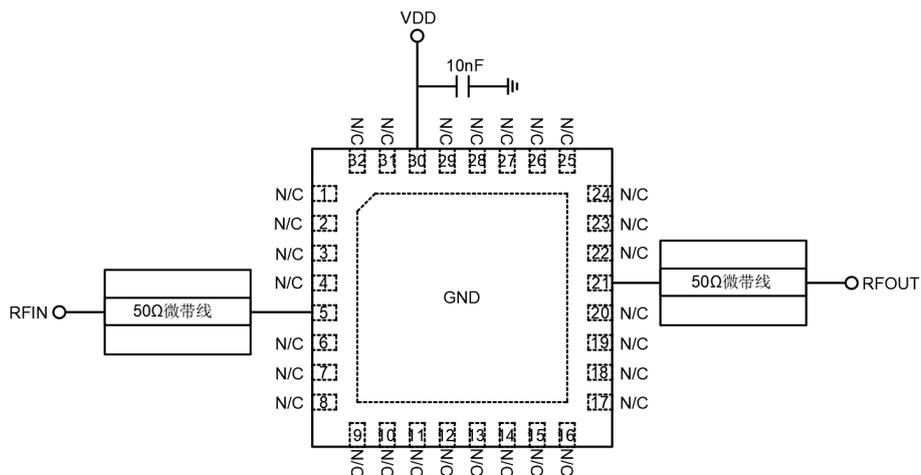
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典型测试曲线 (50Ω系统, 高低温测试)

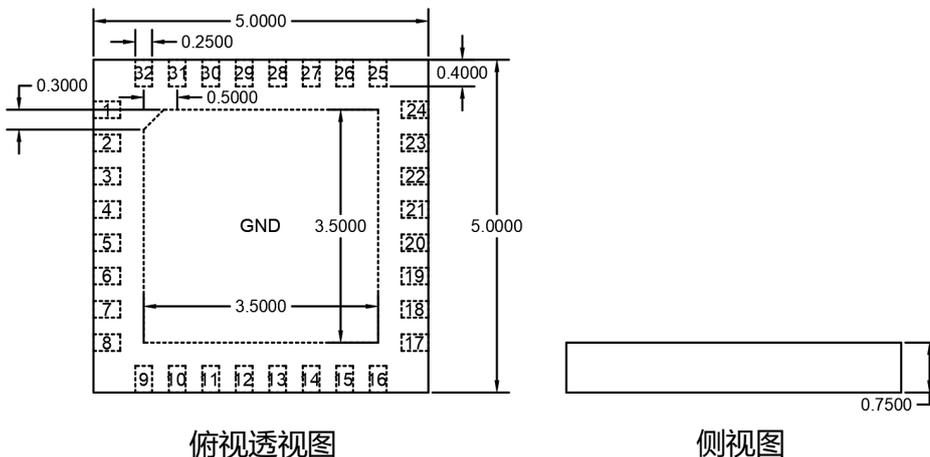


建议装配图



注：
电容尽量靠近芯片引脚。

外形尺寸



俯视透视图

侧视图