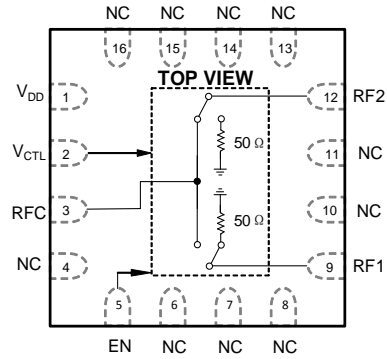




主要特点

- 工作频段: DC ~ 6 GHz
- 插损: 1.1 dB
- 隔离度: 50 dB
- P-0.1: 36 dBm
- IIP3: 59 dBm
- 耐功率: +35 dBm (公共端), +28 dBm (负载端)
- I/O 控制电平: 兼容 1.8V/2.5V/3.3V LVTTTL, 5V TTL
- ESD: RF 2000V HBM, I/O 4000V HBM
- 封装: 16-Lead, 4mmx4mm QFN

功能框图

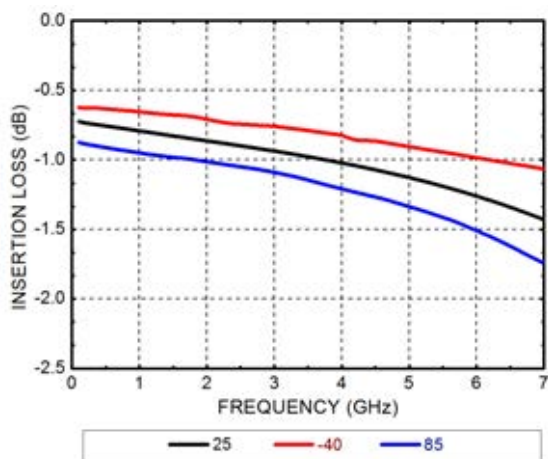


性能指标 ($T_A = +25^{\circ}\text{C}$, $V_{DD}=2.5\sim 5\text{V}$, $V_{CTL}=0\text{V}/V_{DD}$, 50Ω)

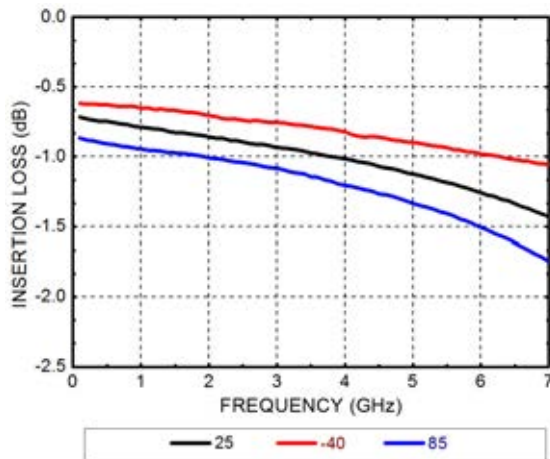
参数	条件		最小	典型	最大	单位
插损	0.1GHz~2.0GHz			0.8	0.9	dB
	2.0GHz~4.0GHz			0.9	1	dB
	4.0GHz~6.0GHz			1.1	1.2	dB
隔离	RFC~RF1/RF2	0.1GHz~2.0GHz	65	70		dB
		2.0GHz~4.0GHz	55	60		dB
		4.0GHz~6.0GHz	50	55		dB
隔离	RF1~RF2	0.1GHz~2.0GHz	50	60		dB
		2.0GHz~4.0GHz	45	48		dB
		4.0GHz~6.0GHz	41	53		dB
回波损耗	开态	0.1GHz~2.0GHz		22		dB
		2.0GHz~4.0GHz		15		dB
		4.0GHz~6.0GHz		13		dB
	关态	0.1GHz~2GHz		20		dB
		2.0GHz~4.0GHz		18		dB
		4.0GHz~6.0GHz		15		dB
开关时间	导通	50% V_{CTL} to 90% RF		330		ns
	关断	50% V_{CTL} to 10% RF		100		ns
输入功率压缩点	P-0.1	$V_{DD}=5\text{V}$		36		dBm
	P-1	$V_{DD}=5\text{V}$		36		dBm
IIP3	$P_{OUT}=12\text{dBm}/\text{tone}$			59		dBm
工作电压	V_{DD}		2.5	3	5	V
控制电压范围	V_{CTL} , EN		0		V_{DD}	V
控制电压输入电平范围	$V_{DD}=+5.0\text{V}$	低电平 (V_{IL})	0		0.6	V
		高电平 (V_{IH})	1.1		V_{DD}	V
	$V_{DD}=+3.0\text{V}$	低电平 (V_{IL})	0		0.6	V
		高电平 (V_{IH})	1.1		V_{DD}	V
功耗	$V_{DD}=+5.0\text{V}$			60		μA
	$V_{DD}=+3.0\text{V}$			55		μA



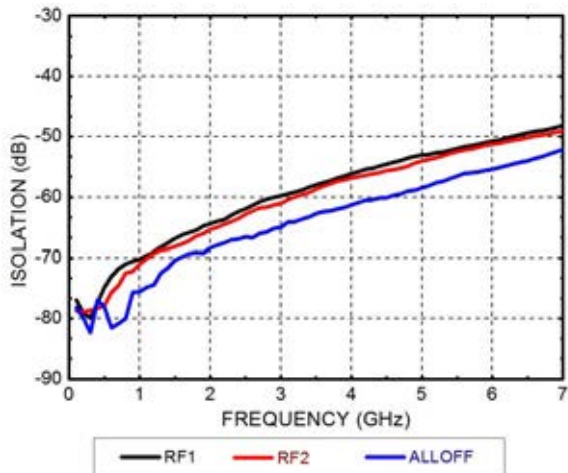
RF1支路插损 vs. 温度



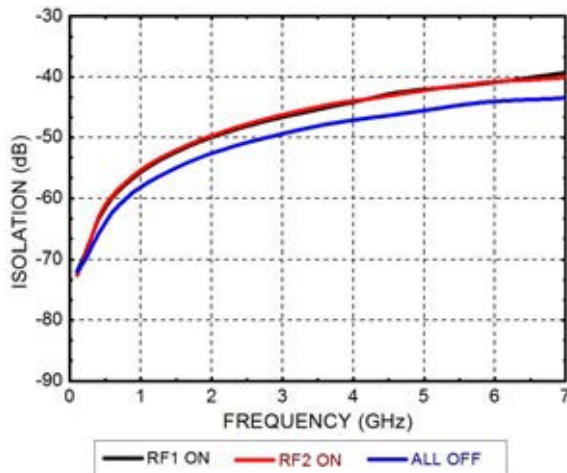
RF2支路插损 vs. 温度



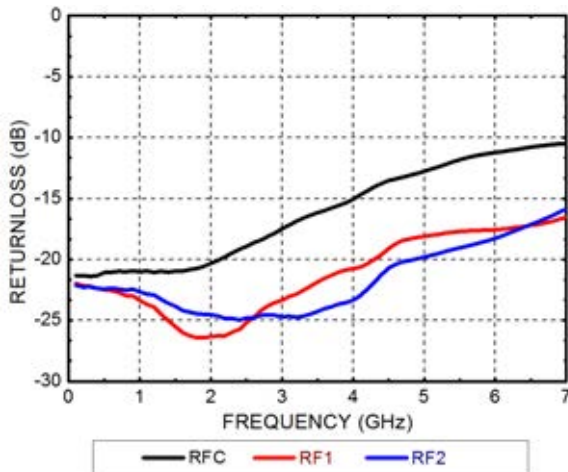
隔离度 (RFC~RF1/RF2)



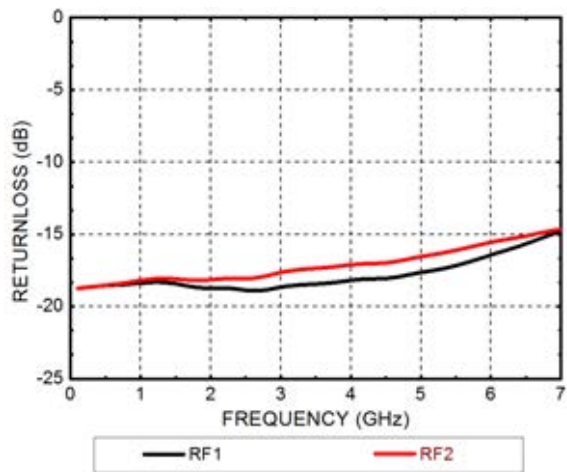
隔离度 (RF1~RF2)



回波损耗 (导通态)

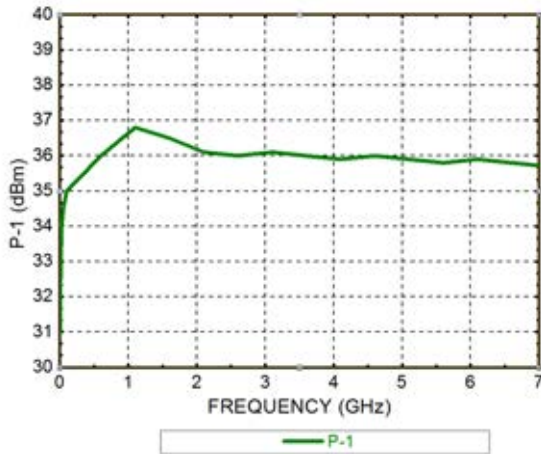


回波损耗 (关断态)

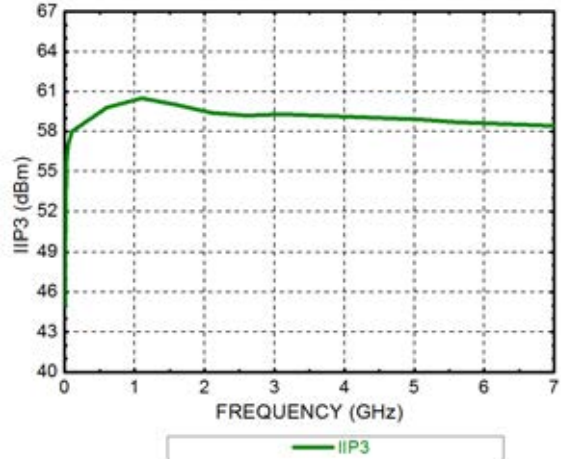




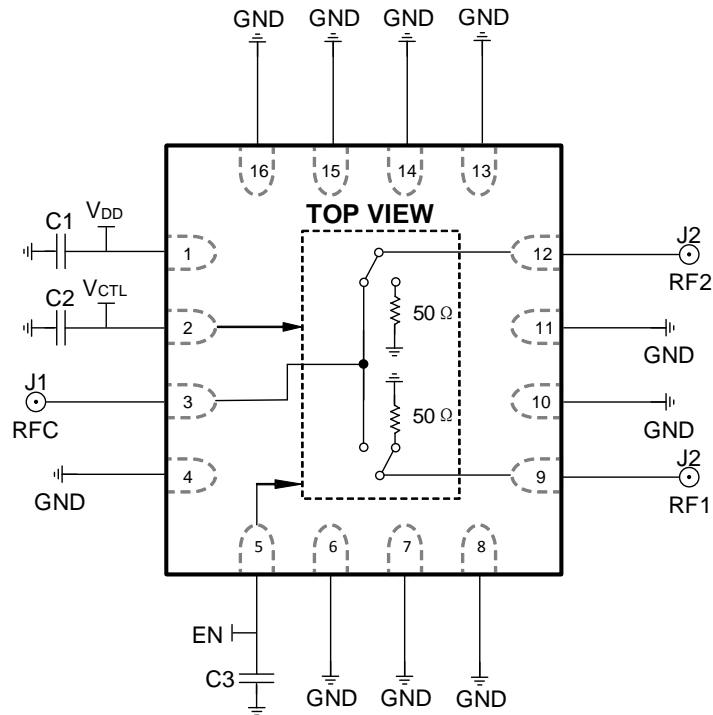
输入P-0.1



IIP3



应用框图



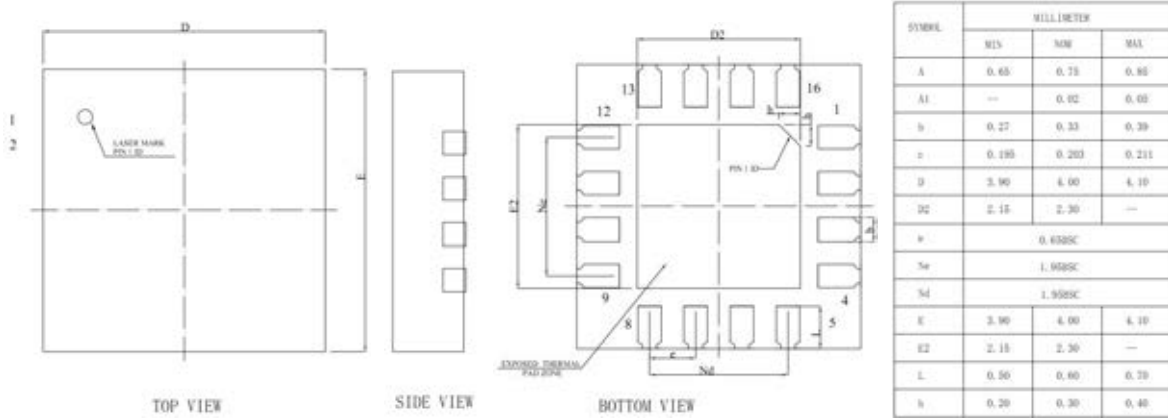
物料信息

名称	描述
J1~J3	SMA 连接器
C1~C3	100pF



封装框架

单位: mm



控制关系

VCTL	EN	RFC-RF1	RFC-RF2
0	0	OFF	ON
1	0	ON	OFF
0	1	OFF	OFF
1	1	OFF	OFF

极限参数

参数	备注	数值	单位
工作电压	V _{DD}	5.5	V
控制电压	V _{CTL} , EN	5.5	V
射频输入功率	直通	35	dBm
	负载	28	dBm
存储温度	-	-65~150	°C
热阻	直通	110	°C/W
	负载	100	°C/W
ESD	HBM	2	kV