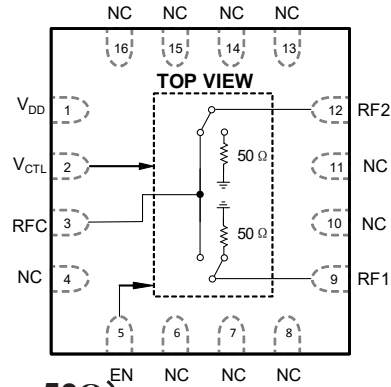




### 主要特点

工作频段: DC~8GHz  
 插损: 0.9dB  
 隔离度: 60dB  
 P-0.1: 36 dBm  
 IIP3: 61dBm  
 耐功率: +35dBm (公共端)  
           +29 dBm (负载端)  
 ESD: 2kV (HBM)  
 封装: 16 Lead, 4mm×4mm QFN

### 功能框图

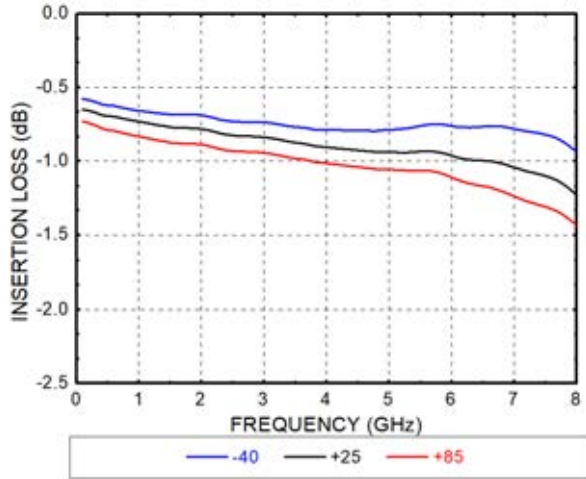


性能指标 ( $T_A = +25^\circ\text{C}$ ,  $V_{DD}=2.5\text{V}\sim 5\text{V}$ ,  $V_{CTL}=0\text{V}/V_{DD}$ ,  $50\Omega$ )

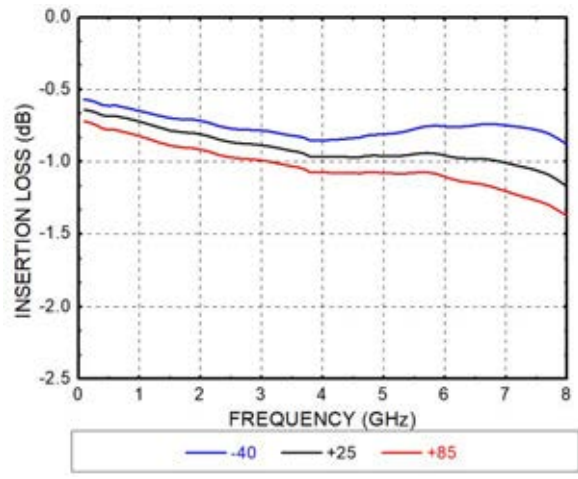
参数	条件		最小	典型	最大	单位
插损	0.1GHz~2.0GHz			0.7	0.9	dB
	2.0GHz~4.0GHz			0.8	1	dB
	4.0GHz~8.0GHz			1	1.4	dB
隔离	RFC~ RF1/RF2	0.1GHz~2.0GHz	60	70		dB
		2.0GHz~4.0GHz	53	60		dB
		4.0GHz~8.0GHz	38	55		dB
隔离	RF1~RF2	0.1GHz~2.0GHz	50	60		dB
		2.0GHz~4.0GHz	47	50		dB
		4.0GHz~8.0GHz	42	48		dB
回波损耗	开态	0.1GHz~2.0GHz		22		dB
		2.0GHz~4.0GHz		20		dB
		4.0GHz~8.0GHz		15		dB
	关态	0.1GHz~2GHz		20		dB
		2.0GHz~4.0GHz		20		dB
		4.0GHz~8.0GHz		20		dB
开关时间	导通	50% $V_{CTL}$ to 90% RF		270		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	$P_{OUT}=12\text{dBm}/\text{tone}$			61		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		$\mu\text{A}$
	$V_{DD}=+3.0\text{V}$			55		$\mu\text{A}$



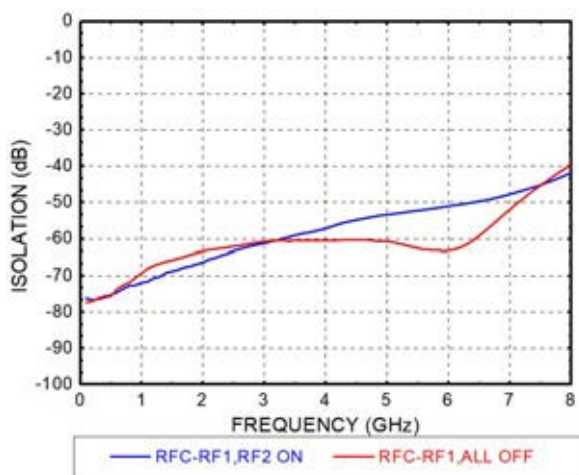
RF1支路插损 vs. 温度



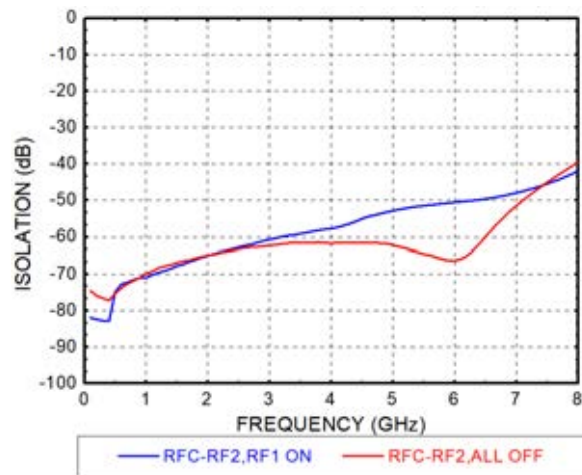
RF2支路插损 vs. 温度



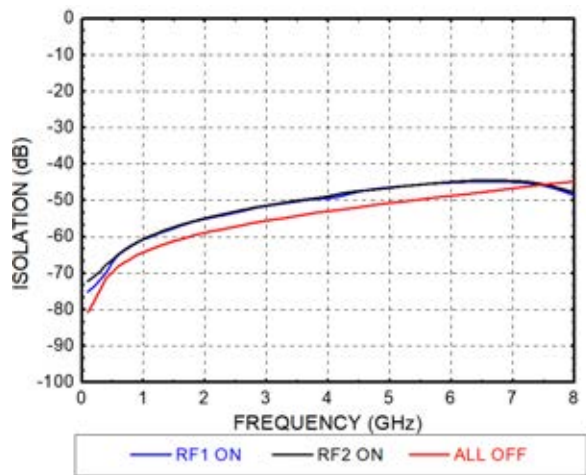
隔离度 (RFC~RF1)



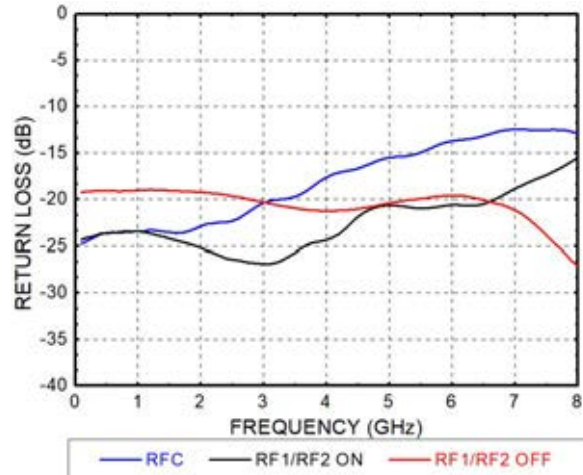
隔离度 (RFC~RF2)



隔离度 (RF1~RF2)

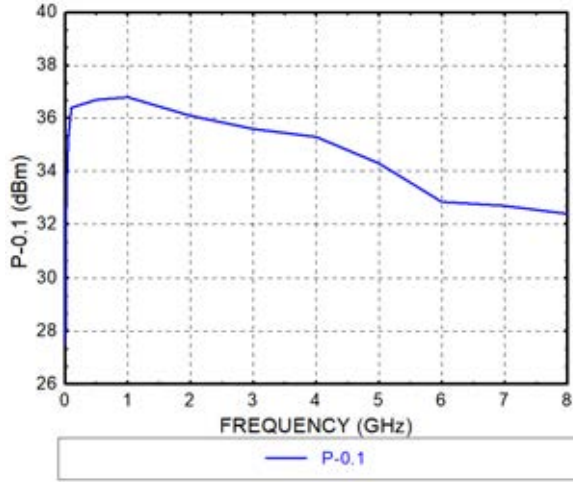


回波损耗

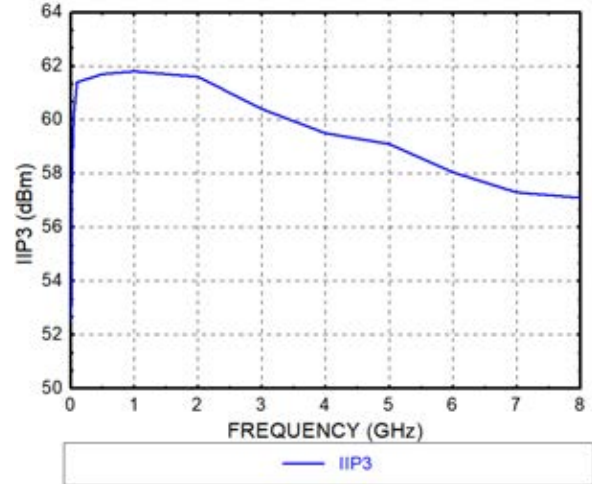




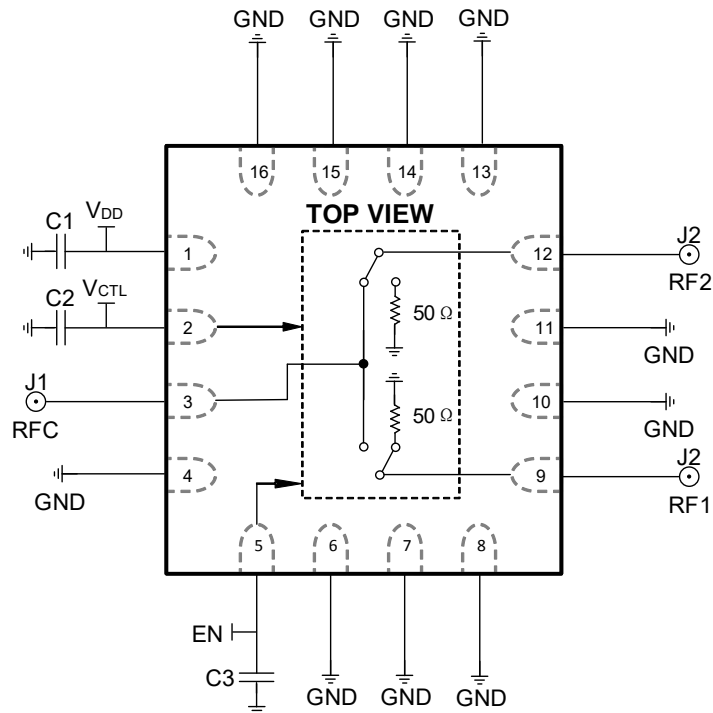
输入P<sub>-0.1</sub> (10MHz~7GHz)



IIP3 (10MHz~7GHz)



应用框图



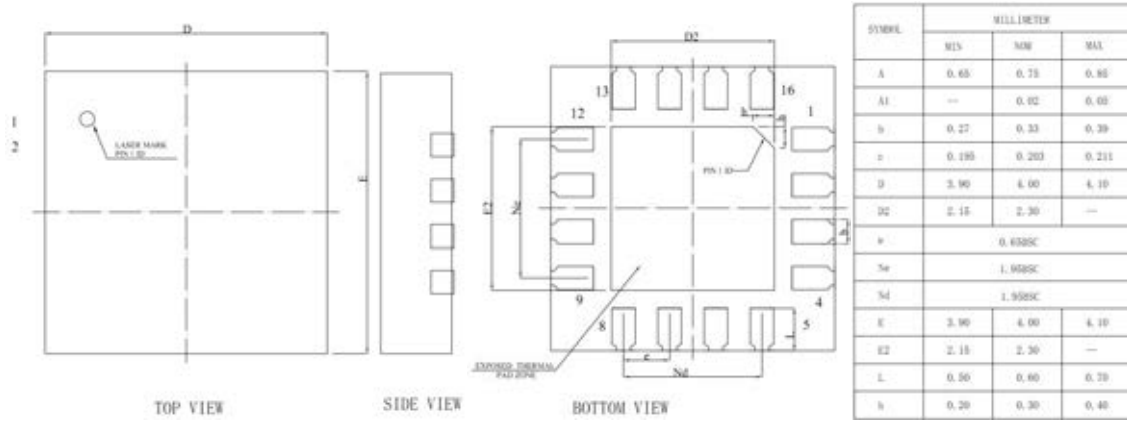
物料信息

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 <sub>DD</sub>	5.5	V
控制电压	V <sub>CTL</sub> , EN	5.5	V
射频输入功率	直通	35	dBm
	负载	29	dBm
存储温度	-	-65~150	°C
热阻	直通	110	°C/W
	负载	100	°C/W
ESD	HBM	2	kV