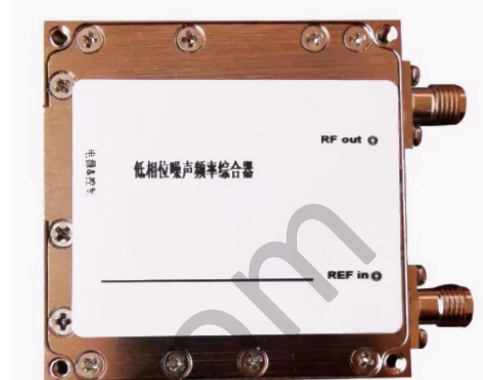


低相位噪声频率综合器 Low Phase Noise Freq. Synthesizer

特点 Features

- 输出频率 Output Freq.: 50MHz~22.6GHz
- 小尺寸 Small Size: 50*50*13mm
- 相位噪声 Phase Noise: -107dBc/Hz@1kHz
-116dBc/Hz@1MHz
- 控制方式 Control Mode: SPI 控制



规格 Electrical Specification@+25°C

型号 Model Number	LFS-1004
输出频率范围 Output Freq. (MHz)	50~22600
频率步进 Frequency Step (Hz)	0.1
跳频时间 Frequency Setting Time (us)	≤400/≤200
输出功率 Output Power (dBm)	4±5
频率稳定度 Frequency Stability	同步与外参考 Sync With External Reference
杂散 Spurious (dBc)	≤-70dBc(Typ)/-65dBc(Max)
谐波 Harmonic (dBc)	≤-5 ≤-20(输出频率 Output Freq.11.3~22.6GHz 的 The 1/2 和 And 3/2 谐波 Harmonic)
参考输入频率 Reference Input Freq.(MHz)	100
输入参考相位噪声 Reference Input Phase Noise	≤-125dBc/Hz@100Hz
	≤-155dBc/Hz@1kHz
	≤-165dBc/Hz@10kHz
	≤-165dBc/Hz@100kHz
	≤-170dBc/Hz@1MHz
参考输入功率 Reference Input Power (dBm)	7±3
注:200us 跳频时间,LFS-1004 每次上电需要 30 秒启动时间,如有更快跳频时间要求咨询厂家 Note: Frequency setting time is 200us, LFS-1004 takes 30 seconds to start each power-On, if there is a faster frequency setting time request, please consult with the manufacturer.	

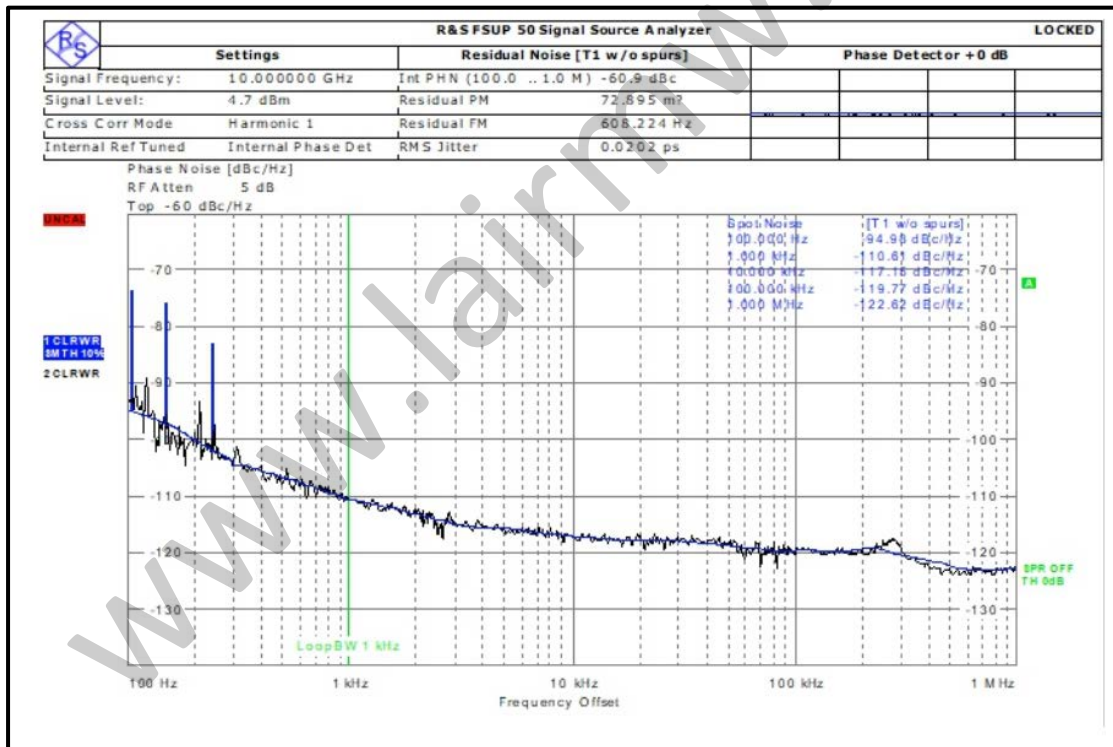
低相位噪声频率综合器 Low Phase Noise Freq. Synthesizer

性能 Typical Performance@+25°C

相位噪声 Phase Noise

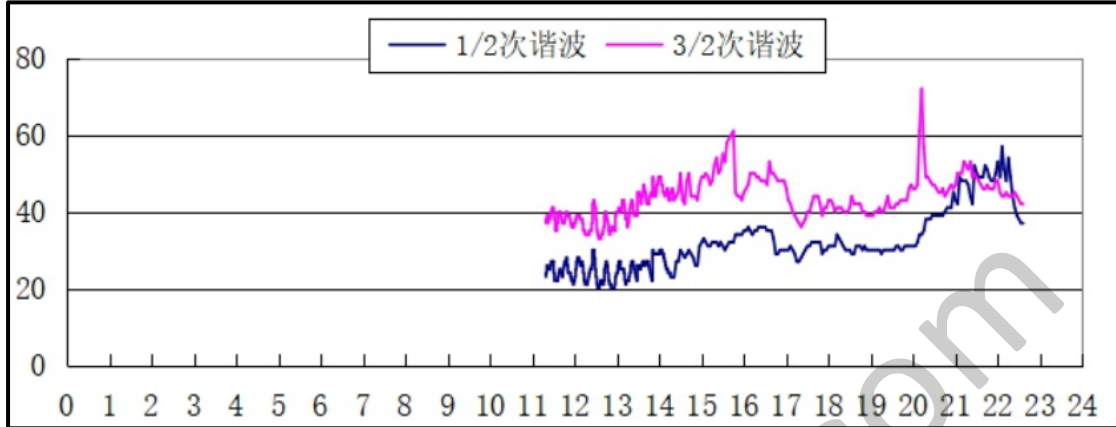
频率 Frequency	1GHz	5GHz	10GHz	22.6GHz
dBc/Hz@100Hz	≤-105	≤-91	≤-85	≤-79
dBc/Hz@1kHz	≤-127	≤-113	≤-107	≤-101
dBc/Hz@10kHz	≤-135	≤-122	≤-116	≤-110
dBc/Hz@100kHz	≤-135	≤-122	≤-116	≤-110
dBc/Hz@1MHz	≤-135	≤-122	≤-116	≤-110

10GHz 相位噪声测试曲线 Phase Noise Curve

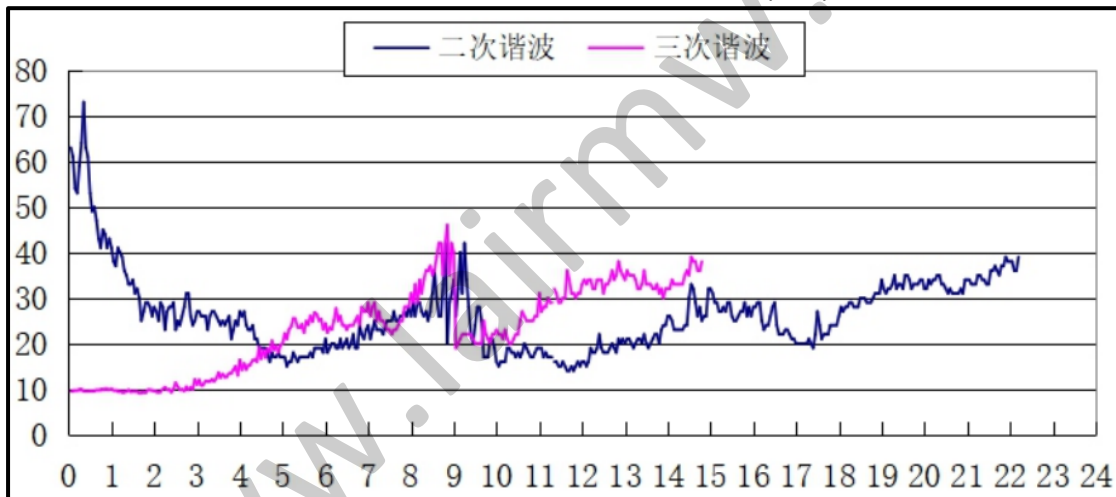


低相位噪声频率综合器 Low Phase Noise Freq. Synthesizer

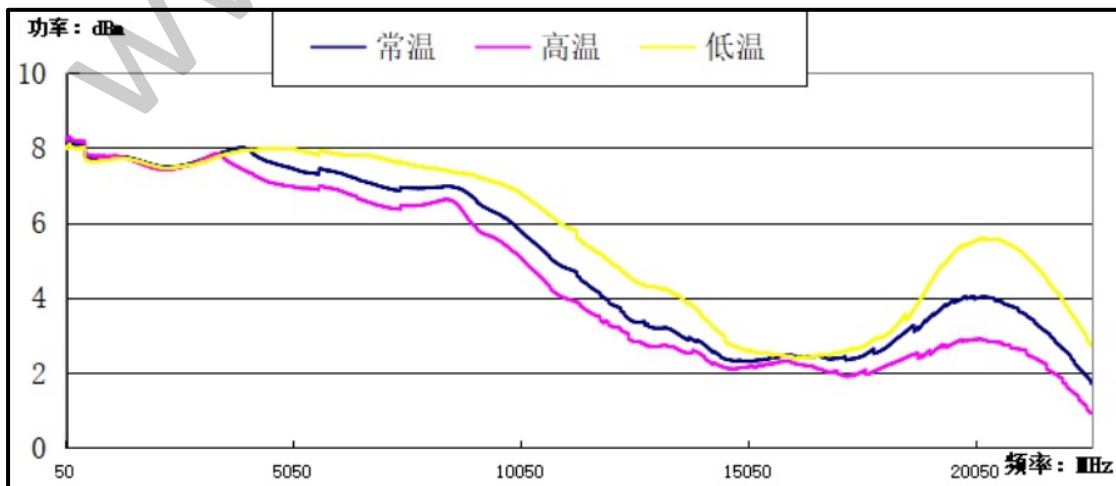
LFS-1004 1/2&3/2 谐波曲线 Harmonic Curve(dBc)



LFS-1004 2&3 谐波 Harmonic Curve (dBc)



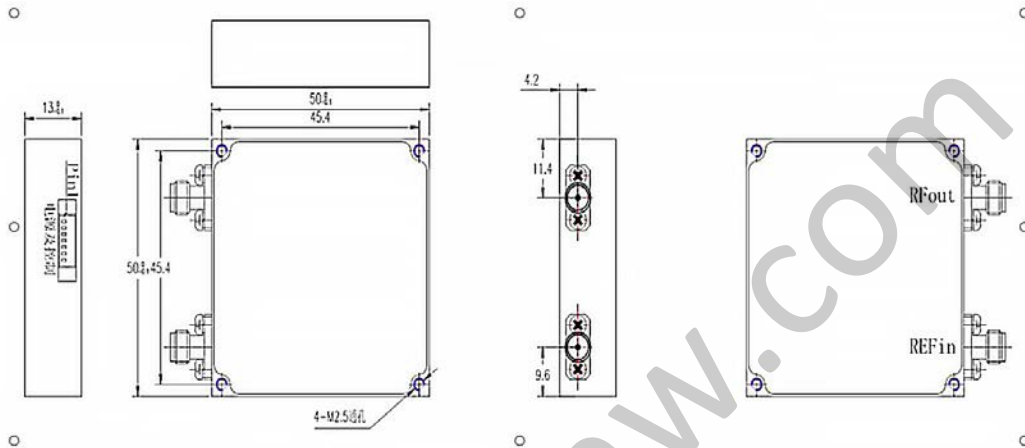
LFS-1004 输出功率 Output Power(dBm)



低相位噪声频率综合器 Low Phase Noise Freq. Synthesizer

外观 Outline

安装尺寸 Installation Dimension



连接器定义 Connector Definition

RF in	SMA-K (可拆卸 Detachable) (Φ0.38)		
RF out	2.92(K-F) (可拆卸 Detachable) (Φ0.38)		
电源和控制 Power Supply & Control	53261-0671-7P(1.25 间距;单排 7 针卧式排座)		
管脚定义 Pin Definition			
1	+12V(电源)	4	LE(SPI 通信接口)
2	GND(地)	5	MISO(SPI 通信接口)
3	MOSI(SPI 通信接口)	6	SCK(SPI 通信接口)
7	LD(锁定指示:高电平锁定)		

工作电压 Operating Voltage

供电 Power Supply	+12V±0.5(V/A)
最大电压 Max Voltage	+15V
工作电流 Operating Current	0.5A(Typical)
控制方式 Control Mode	SPI

运行环境及外形封装 Operating Environment & Package

工作温度 Operating Temperature	-40~+70℃
储存温度 Storage Temperature	-55~+85℃
重量 Weight	≤80g
外形尺寸 Size	50*50*13mm