

TLFS11-0220-M

0.2-22 GHz Frequency synthesizer, 10 dBm

电气参数 Electrical Characteristics:

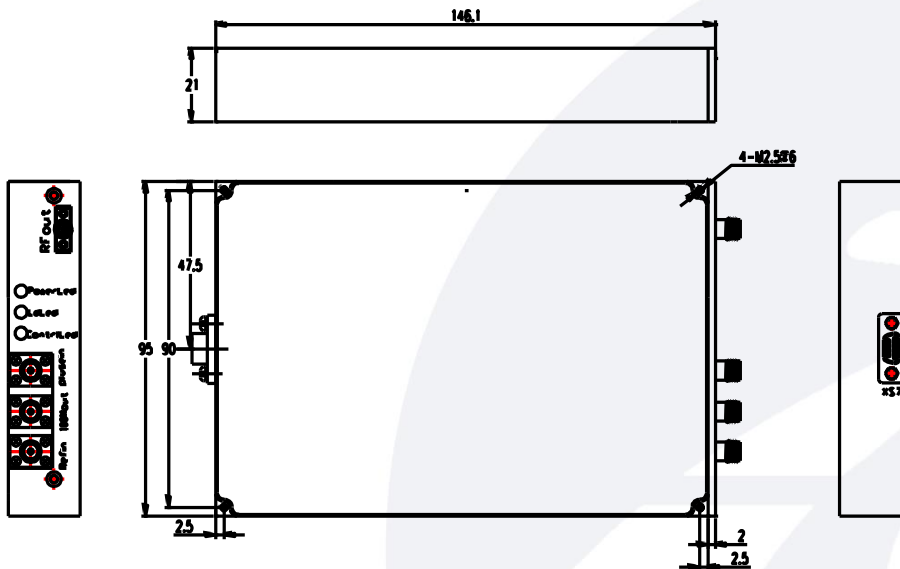
参数Parameter		参数Parameter			
Input Frequency输入频率 (MHz)		10			
Input Power 输入功率 (dBm)		5±3			
Input Reference Phase Noise输入参考相位噪声		-155dBc/Hz@1kHz			
Impedance输入阻抗		50 Ω			
Output Frequency输出频率 (MHz)		200~20000			
Frequency Step频率步进 (Hz)		0.1 (100MHz~15GHz) /0.2 (15GHz~20GHz)			
Switching time跳频时间 (uS)		≤ 200			
Output Power输出功率 (dBm)		-40~+10			
Power Step功率步进 (dBm)		0.1			
Flatness输出功率平坦度 (dBm)		± 2.5			
Frequency stability频率稳定度		2×10 ⁻⁷ (Synchronizes the external reference when external reference is used)			
frequency accuracy频率准确度		2×10 ⁻⁷ (Synchronizes the external reference when external reference is used)			
Spurious杂散 (dBc)		≤ -70 (Typ) ≤ -65 (Max)			
Harmonics谐波 (dBc)		≤ -20 (0dBm test)			
Phase Noise相位噪声	dBc/Hz@100Hz	@1GHz	≤ -95	@5GHz	≤ -81
	dBc/Hz@1kHz		≤ -120		≤ -106
	dBc/Hz@10kHz		≤ -130		≤ -116
	dBc/Hz@100kHz		≤ -130		≤ -116
	dBc/Hz@1MHz		≤ -132		≤ -118
Phase Noise相位噪声	dBc/Hz@100Hz	@10GHz	≤ -75	@20GHz	≤ -69
	dBc/Hz@1kHz		≤ -100		≤ -93
	dBc/Hz@10kHz		≤ -110		≤ -103
	dBc/Hz@100kHz		≤ -110		≤ -103
	dBc/Hz@1MHz		≤ -112		≤ -105
Power Supply供电 (V/A)		+12V/1.6A (Start up) /+12V/1.3A (working)			
Max Voltage 最大电压 (V)		+15V			
Control控制方式		UART			
pulse modulation脉冲调制 (ALC Closed Mode) 5°C					
modulation depth调制深度		≥ 60dBc (测试功率: +10dBm)			
Modulated pulse width调制脉冲宽度		100ns~10ms			
Passband Ripple带内波动 (dB)		0.5dB			

环境和物理特性 Environmental And Physical Characteristics:

参数Parameter	参数Parameter
Operating Temperature操作温度	-40°C to +70°C
Storage Temperature存储温度	-55°C to +85°C
Vibration(operating)震动	10G RMS, 20-2000HZ
Shock 冲击	50G, 1/2Sine, 12msec
Connector射频接口	3.5mm Female
DC connector直接接口	J30J-9-ZKP
Weight重量	TBD

Unit: mm

外形尺寸 Outline Drawing:



MICRO-D9 Female Define	
引脚 Pin #	功能 Function
1-2	+12V
3-5	GND
5-7	NC
8	RX
9	TX

订货信息 Ordering Information:

标准型号 Part Number	描述 Description	版本号 Revision
TLFS11-0220-M	0.2-22 GHz Frequency synthesizer, 10 dBm,	Rev.1.1