

Comb Generator

0.06-18GHz

Model: TLCG60M18G-S

This TLCG60M18G-S is designed to provide stable, high purity equidistant frequency comb signals. It operates within 60 MHz to 18 GHz. Featuring low phase noise, high stability and excellent spectral purity, the module delivers reliable multitone output. Widely used in spectrum testing, frequency calibration, microwave measurement and communication system verification.

Features:

- Output harmonic Frequency range: 0.06-18 GHz
- 50 Ohm Matched Input / Output

Applications:

- Communication receiver
- Laboratory test
- Sensor radar

电气特性 Electrical Characteristics:

参数 Parameter	Min	Typ	Max	单位 Units
输入频率范围 Input Frequency range	0.03		10	GHz
输入功率 Input Power	17	18	22	dBm
输出频率范围 Output Frequency range	0.06		18	GHz
最大输出谐波次数 Maximum Output Harmonic Factor	@Input=0.1GHz	23		
	@Input=0.2GHz	15		
	@Input=3GHz	6		
	@Input=5GHz	3		
相位噪声 Phase Noise@1MHz		-180		dBc/Hz
阻抗 Impedance		50		Ohms

机械特性 Mechanical Specifications:

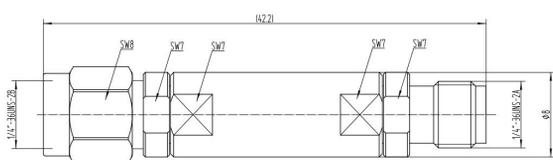
参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	2.92mm Male/2.92mm Female	
长度 Size	42.2	mm

绝对最大值 Absolute Maximum Ratings:

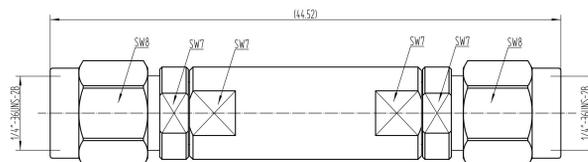
参数 Parameter	指标 Value
输入功率 RF Input Power	+22 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形图 Outline Drawing:

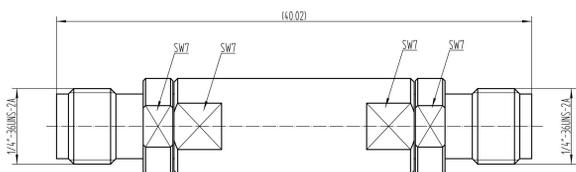
Unit:mm



TLCG60M18G-S



TLCG60M18G-S-MM



TLCG60M18G-S-FF



ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-45		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude		10,000		feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

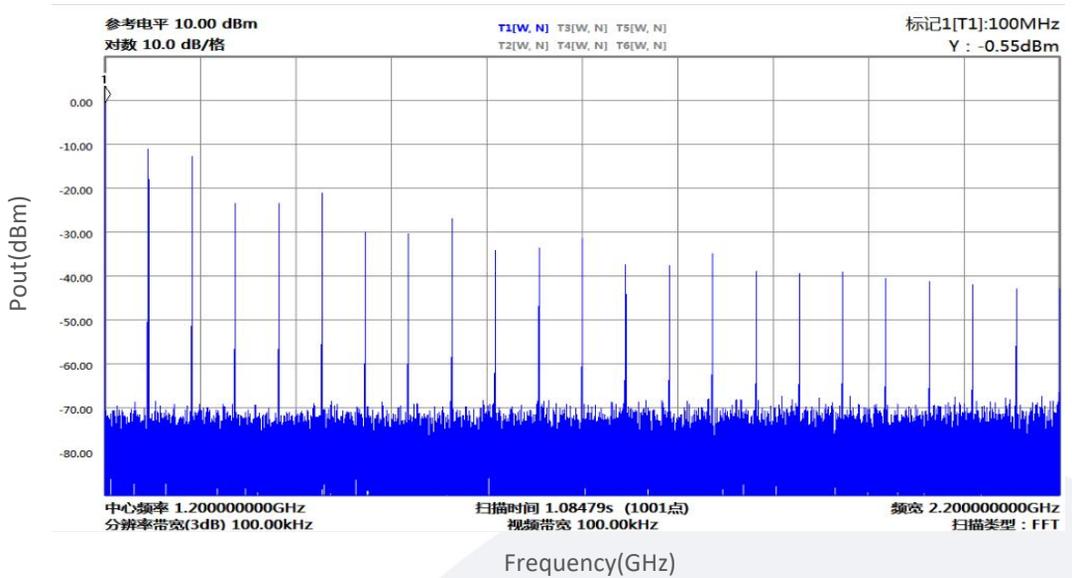
订货信息 Ordering Information:

标准型号 Base Number	描述 Description	版本号 Revision
TLCG60M18G-S	Comb Generator, 0.06-18GHz	Rev.1.0

典型曲线 Typical Performance Data:

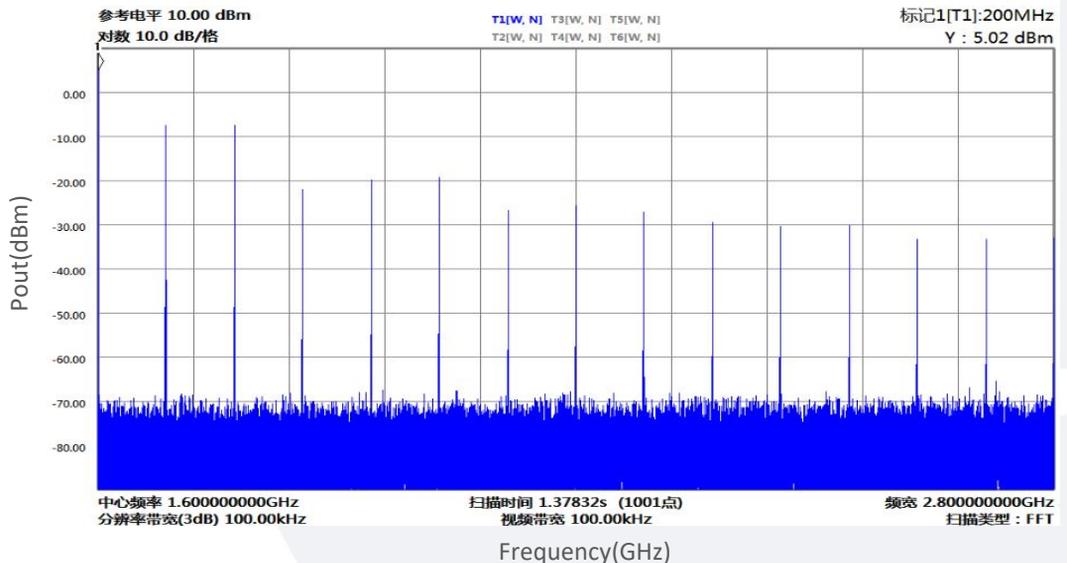
0.1GHz:

Pout vs Frequency



0.2GHz:

Pout vs Frequency

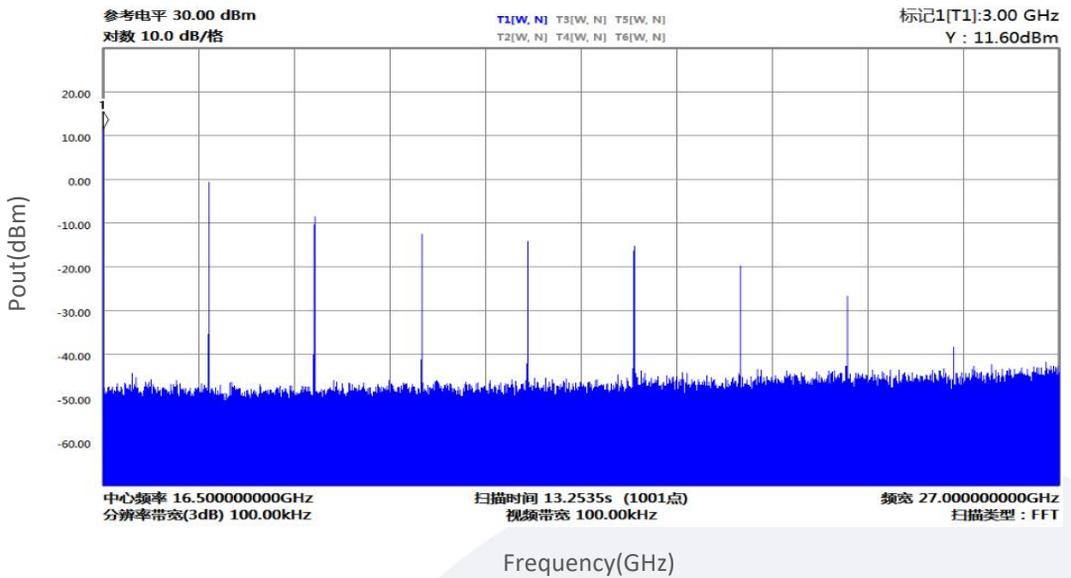


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

典型曲线 Typical Performance Data:

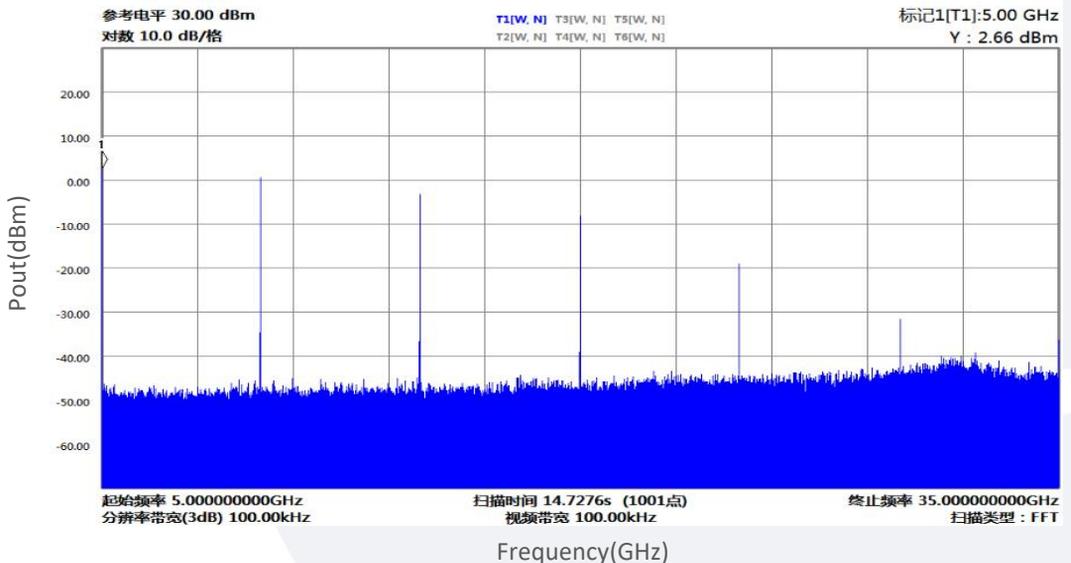
3GHz:

Pout vs Frequency



5GHz:

Pout vs Frequency



Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.