Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

Voltage-controlled Oscillator

RF:8-16 GHz/Output Power: 12dBm

Model: TLVCO8G16G-12-S

TLVCO8G16G-12-S is a wideband MMIC voltage controlled oscillator with output frequency from 8 GHz to 16 GHz. Output power and phase noise performance are excellent over temperature . The vtune port accepts an analog tuning voltage from 0 to +23V. TLVCO8G16G-12-S operates from a single +12V supply.

Features:

- Output Frequency: 8-16 GHz
- Output Power: 12dBm Typ
- Low power consumption
- 50 Ohm Matched Output

Applications:

- Industrial/Medical Equipment
- Test & Measurement Equipment
- Satcom
- Military Radar, EW, & ECM

电气特性 Electrical Characteristics:

参数 Parameter	Min	Typ	Max	单位 Units
输出频率 Output Frequency	8		16	GHz
输出功率 Output Power		12		GHz
单边带相位噪声 SSB Phase Noise @10 kHz Offset		-66		dBc/Hz
单边带相位噪声 SSB Phase Noise @100 kHz Offset		-92		dBc/Hz
单边带相位噪声 SSB Phase Noise @1 MHz Offset		-116		dBc/Hz
调谐电压 Tune Voltage (VT)	0		23	V
调谐灵敏度 Tuning Sensitivity	100	450	900	MHz/V
供电电压 DC Voltage		12		V
供电电流 DC Supply Current		100		mA
阻抗 Impedance		50		Ohms

Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

机械特性 Mechanical Specifications:

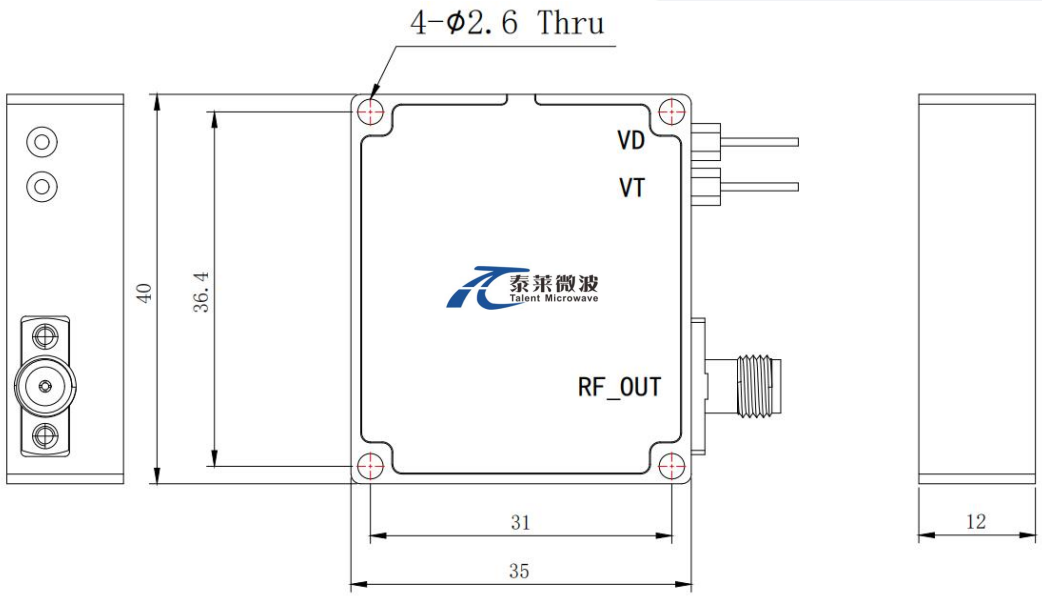
参数 Parameter	指标 Value	单位 Units
RF接口 RF Connector	SMA Female	
尺寸 Size	40*35*12(Without Connector)	mm

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+15V
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形图 Outline Drawing:

Unit:mm; Tolerance:±0.1mm



***Heat Sink Required During Operation

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

Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

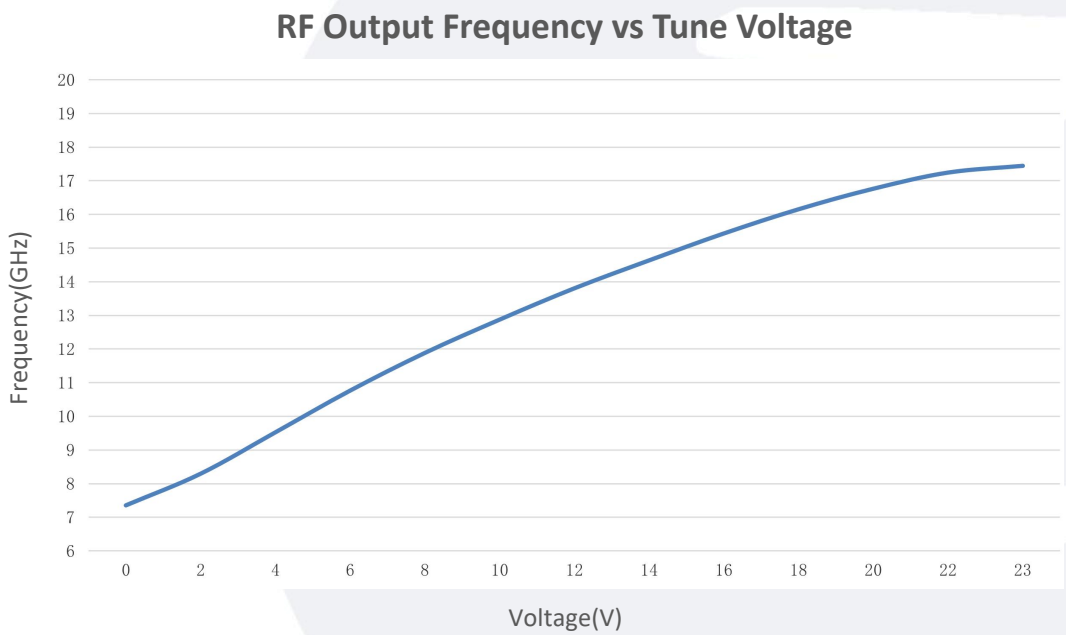
温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-45		+85	℃
存储温度 Non-operating Temperature	-55		+100	℃
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
TLVCO8G16G-12-S	Voltage-controlled Oscillator RF:8-16 GHz; Output Power: 12dBm	Rev.1.0

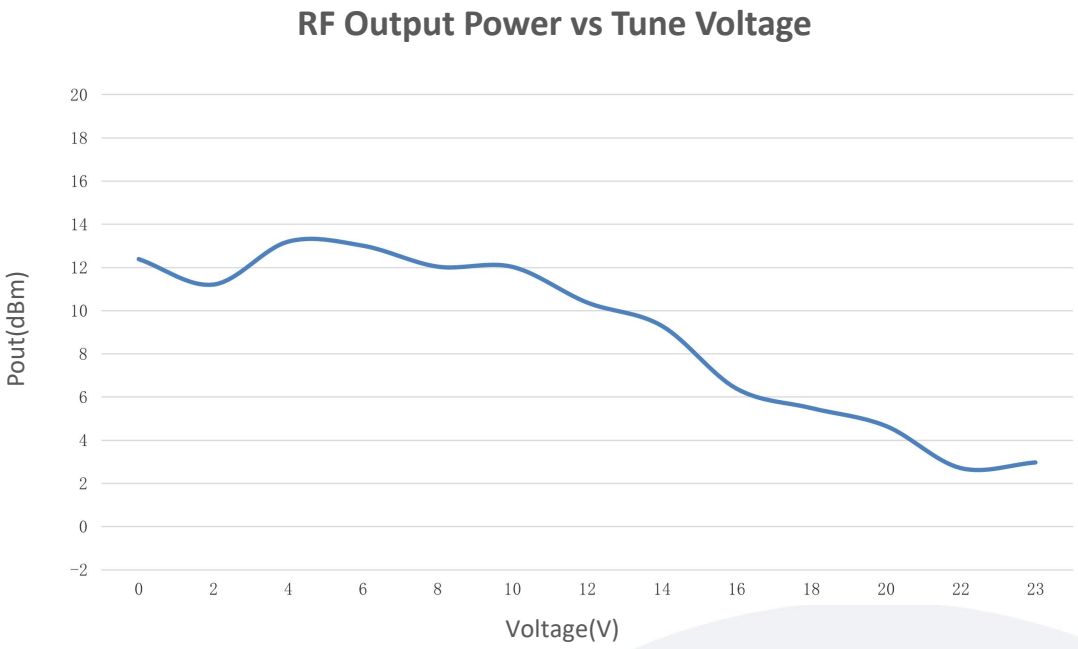
典型曲线 Typical Performance Data:



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.

Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

典型曲线 Typical Performance Data:



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.