

# 8-16GHz Voltage Control Oscillator



### Product Overview

AT-VCO-0816A is a high performance voltage controlled oscillator module from 8-16GHz. The VCO provides very low phase noise and low power consumption.

Both input and output ports are SMA connector. The Vtune port accepts an analog tuning voltage from 0 to +23V.

More information, please visit [www.atmicrowave.com](http://www.atmicrowave.com)

### Advantages

- ✓ Wideband Tuning
- ✓ Low SSB phase noise
- ✓ Low power consumption
- ✓ Single Power Supply

### Application

- ✓ 5G Communication
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

### Key Features

Parameter	Min	Typical	Max
RF OUT Frequency Range		8-16GHz	
Output Power		+3dBm	
Phase Noise @100kHz		-92dBc/Hz	
Phase Noise @10kHz		-64dBc/Hz	
Vtune Range	0		+23V
Vtune Current		10 uA	100uA
3dB FM BW (No Test)		1MHz	
2 <sup>nd</sup> Harmonic		-10dBc	
Vdd		+5V	+8V
Current		100mA	





# AT-VCO-0816A

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## Mechanical Information

Item	Description
Vtune Port	SMA Female
RF Output Port	SMA Female
Vdd Power Supply	PIN
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	50g
Size:	30x30x9.5 mm

## Absolute Maximum Ratings Table

Parameter	Value
Drain Supply	+13V
Vtune	+25V
Operating Temperature	-20 to + 70C
Storage Temperature	-65 to +150C

### Caution:

Please pay attention to the case temperature. If case temperature exceed higher than +50C, heat sink and fan are required, or the amplifier may be damaged.

### Notes:

1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.

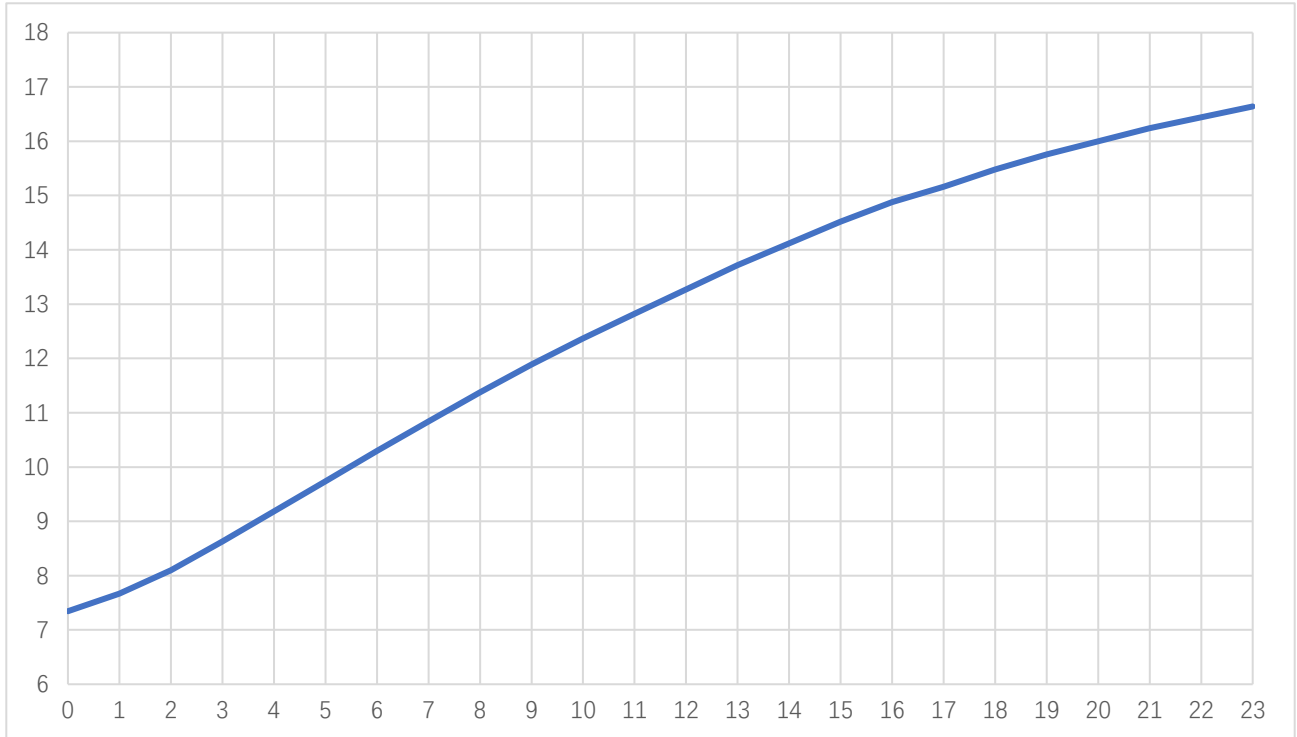




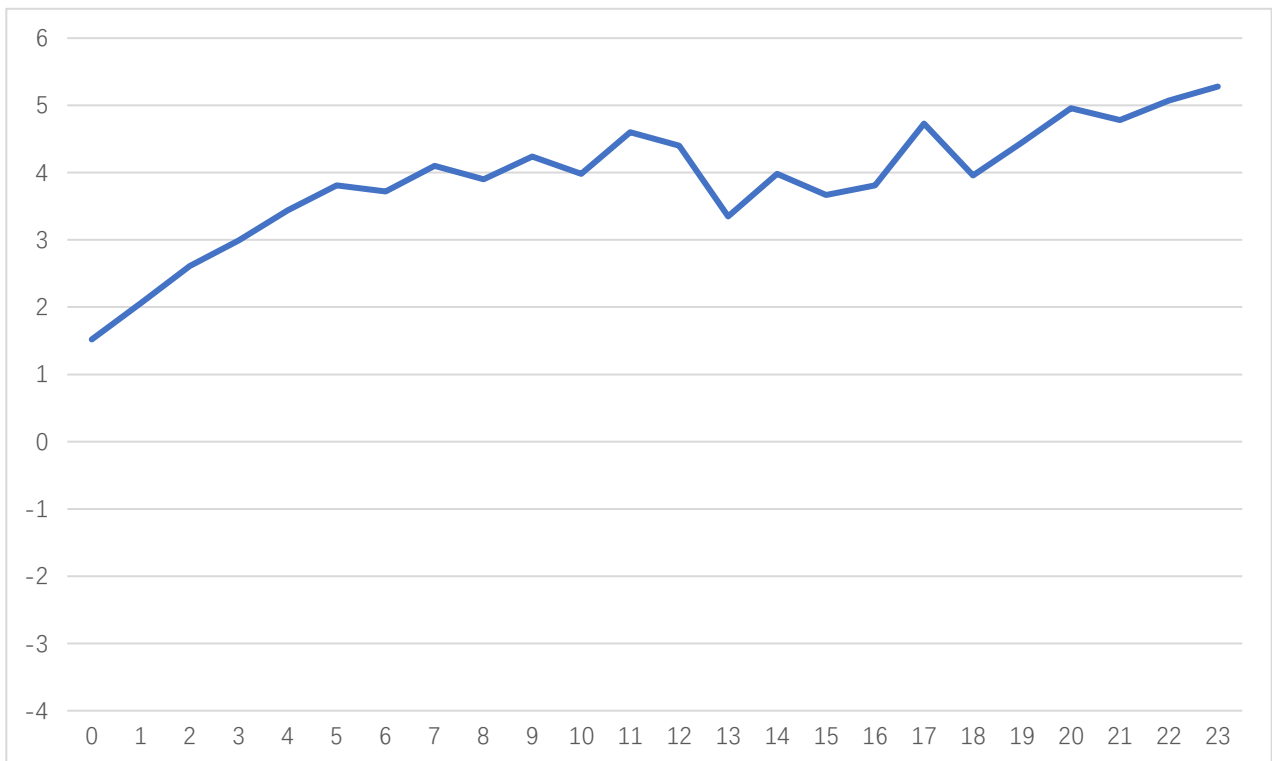
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## Test Data:



Output Frequency vs Tuning Voltage



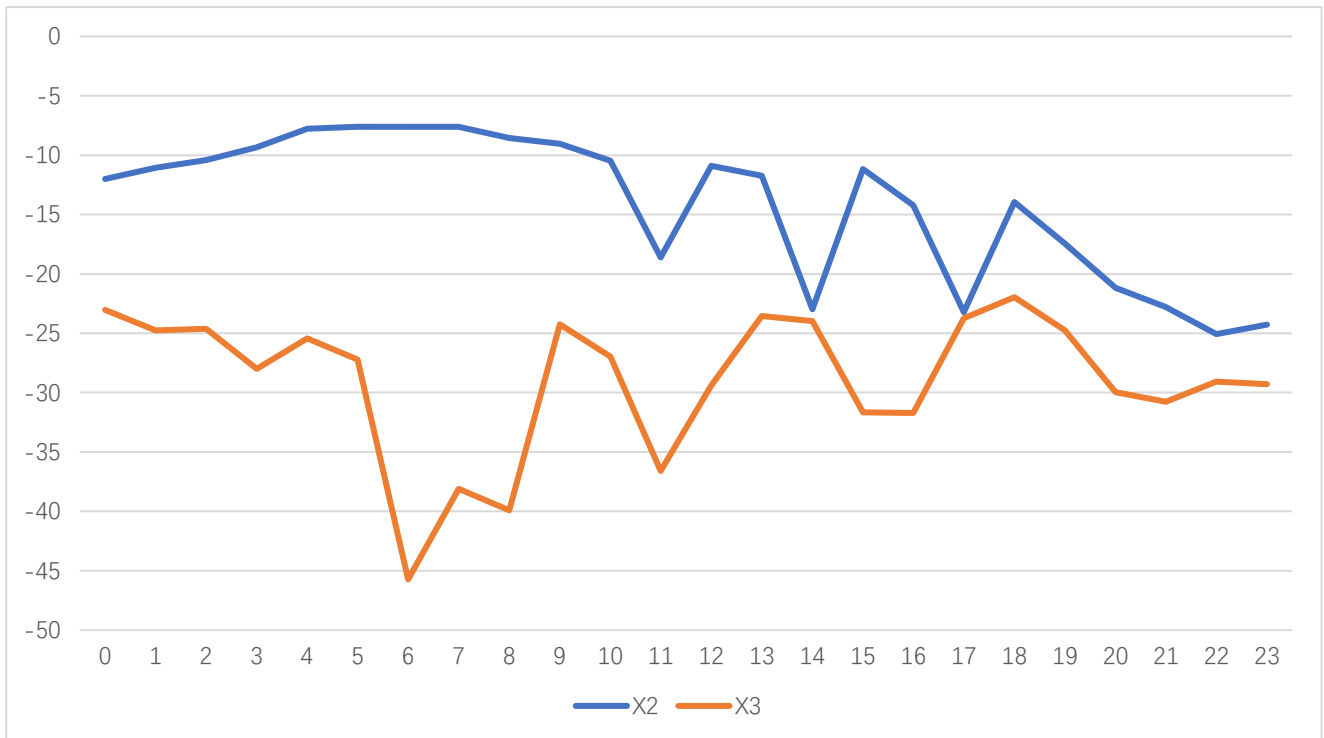
Pout vs Tuning Voltage





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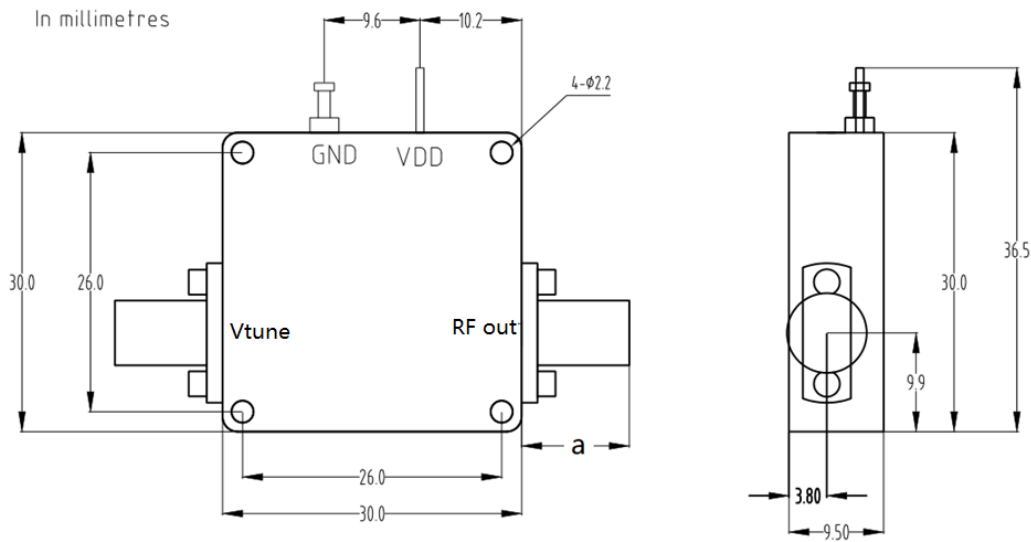
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X2/X3 Harmonics /dBc vs Vtune



### Dimension: (unit in mm)



	<26.5GHz	<40GHz	<50GHz	<67GHz
Connector	SMA	2.92mm	2.4mm	1.85mm
Lenth of a	9.4mm	9.5mm	10.8mm	11.3mm

Note: Female Default. Contact with us for other types.

