

### 2400 – 2500MHz VCO

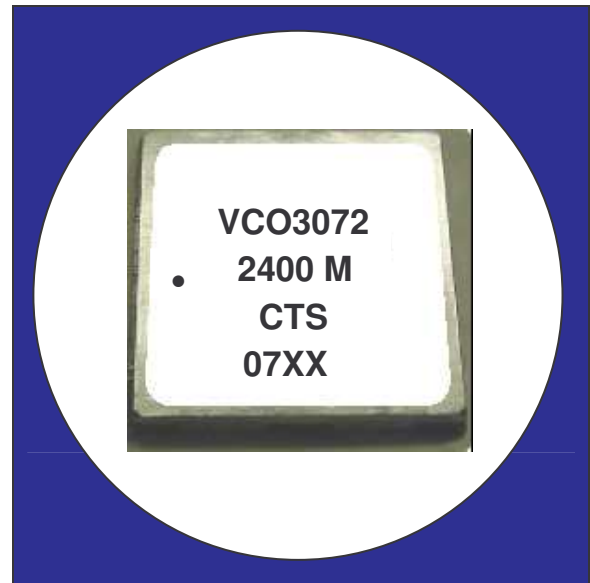
#### FEATURES

- Industry Standard 12.7x12.7mm SMT Footprint
- +5Vdc Supply Voltage
- -30°C to +70°C Temp. Range
- Low Phase Noise
- Tape & Reel Packaging
- Fully compliant to RoHS Directive 2002/95/EC

#### DESCRIPTION

The CTS VCO3072 is a high performance SMT VCO. It's low phase noise makes it the ideal choice for any wireless telecommunications system.

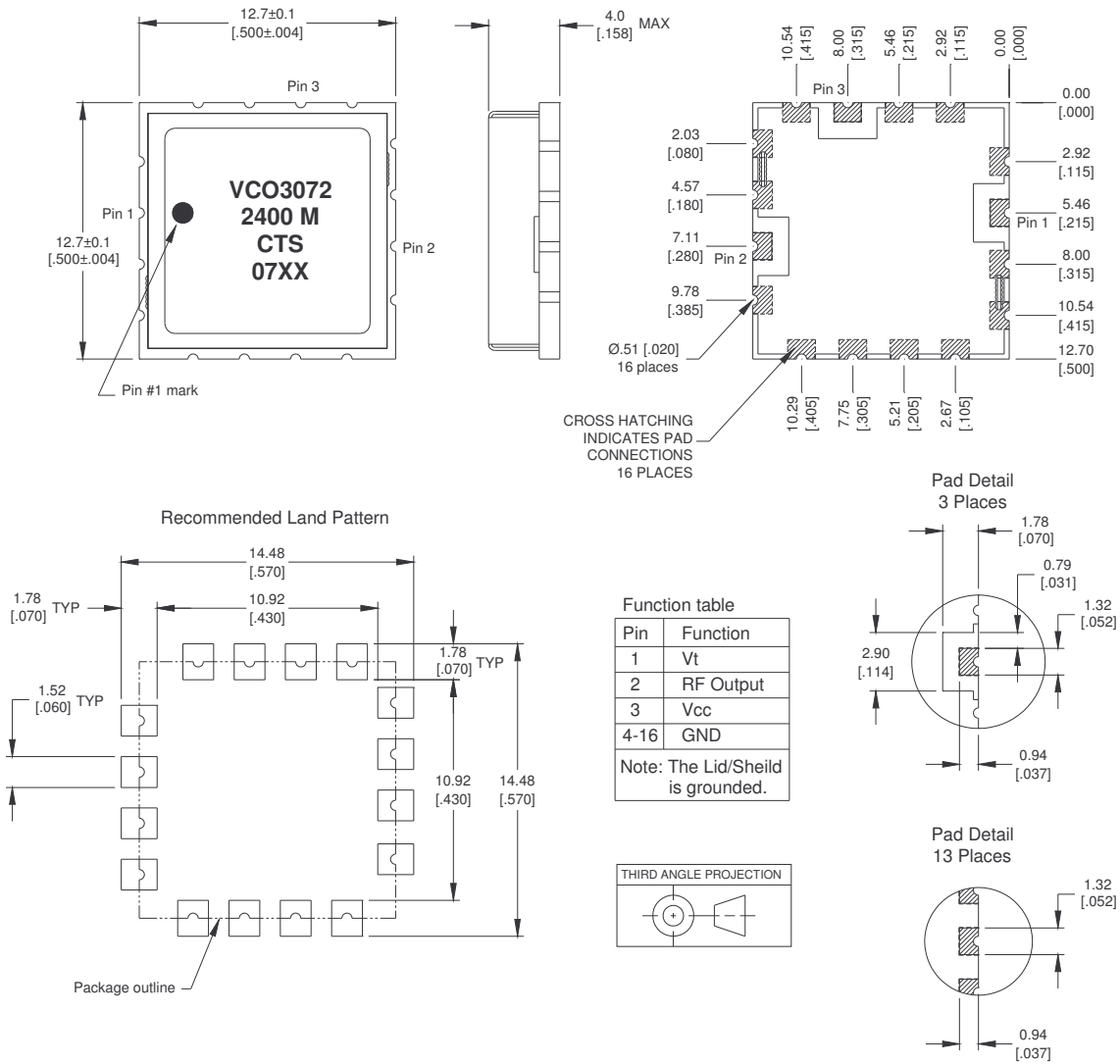
- See [WWW.CTSCORP.COM](http://WWW.CTSCORP.COM) for product patent status.



#### ELECTRICAL SPECIFICATIONS

Parameter	Conditions & Remarks	Min	Typical	Max	Unit
Operating Frequency	F <sub>OUT</sub>	2400	-	2500	MHz
Supply Voltage	V <sub>CC</sub>	4.75	5	5.25	Vdc
Supply Current	I <sub>CC</sub>	-	-	21	mA
Operating Temperature Range	T <sub>OP</sub>	-30	-	+70	°C
Storage Temperature Range	T <sub>STG</sub>	-40	-	+125	°C
Tuning Voltage Range	V <sub>T</sub>	0	-	5	Vdc
Tuning Sensitivity		-	47	-	MHz/V
Power Output	(RF Amplitude)	0.5	3.5	6.5	dBm
Pushing	(5V +/- 0.25V)	-	5	-	MHz/V
Pulling	(VSWR = 1.75:1)	-	12	-	MHz
Harmonic Suppression	2 <sup>nd</sup>	-	-10	-	dBc
Harmonic Suppression	3 <sup>rd</sup>	-	-10	-	dBc
Spurious response		-	-	-80	dBc
Output Impedance		-	50	-	Ohms
Phase Noise	10kHz	-	-96	-93	dBc/Hz
	100kHz	-	-	-115	dBc/Hz
	1000KHz	-	-137	-135	dBc/Hz

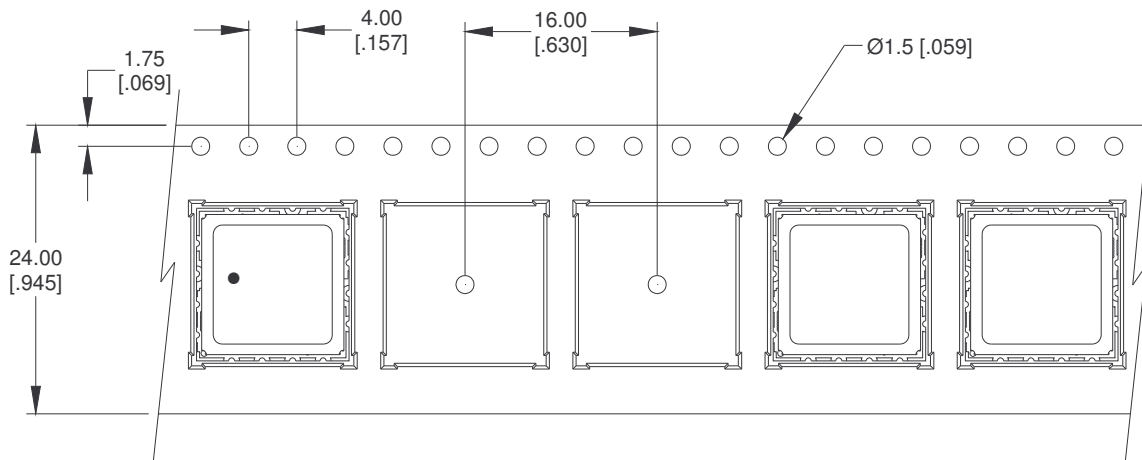
**MECHANICAL SPECIFICATIONS:**



All dimensions are in MM [Inches].  
 All dimensions are nominal unless otherwise specified.  
 Lead Termination Finish: Gold Flash, <10 micro inch, over Ni plated Cu.

**Tape & Reel Information:**

Tape width 24 mm, pitch 16 mm, as per EIA 481-2, 1000 units max per 330 mm reel.



All dimensions are in MM [INCHES].

All dimensions are Nominal

**STANDARD ENVIRONMENTAL LIMITS:**

This product is capable of operating within the following environmental conditions:

**Operating Temperature:** -30 to +70 °C.

**Storage Temperature:** -40 to +125 °C.

**Humidity:** 85% Relative humidity max @ 50°C.

**Solder Reflow Conditions:** Device is capable of withstanding reflow of 260 degrees C for 10 seconds maximum.

**Atmospheric Pressure:** 730 to 780 mm Hg.

**Moisture Sensitivity:** MSL 1

**RoHS:** This device is fully compliant to RoHS Directive 2002/95/EC