

## 1079 - 1114MHz VCO

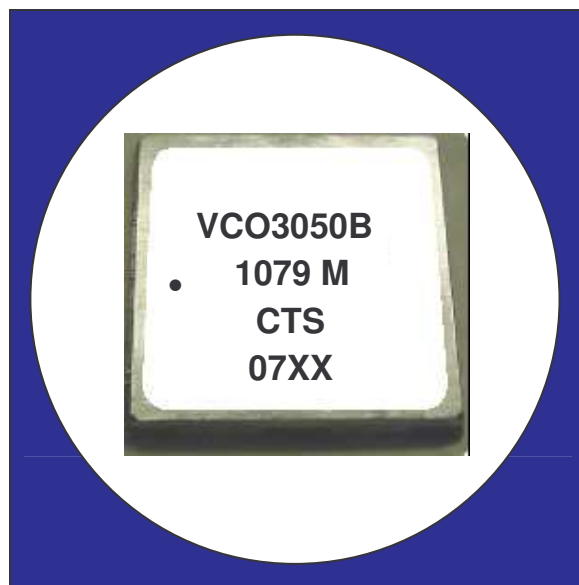
### FEATURES

- Industry Standard 12.7x12.7mm SMT Footprint
- +5.3Vdc Supply Voltage
- -35°C to +85°C Temp. Range
- Low Phase Noise
- Tape & Reel Packaging
- Fully compliant to RoHS Directive 2002/95/EC

### DESCRIPTION

The CTS VCO3050B is a high performance SMT VCO. Its 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.

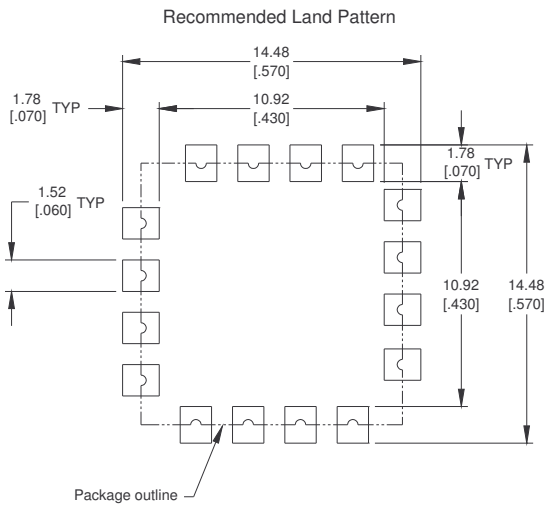
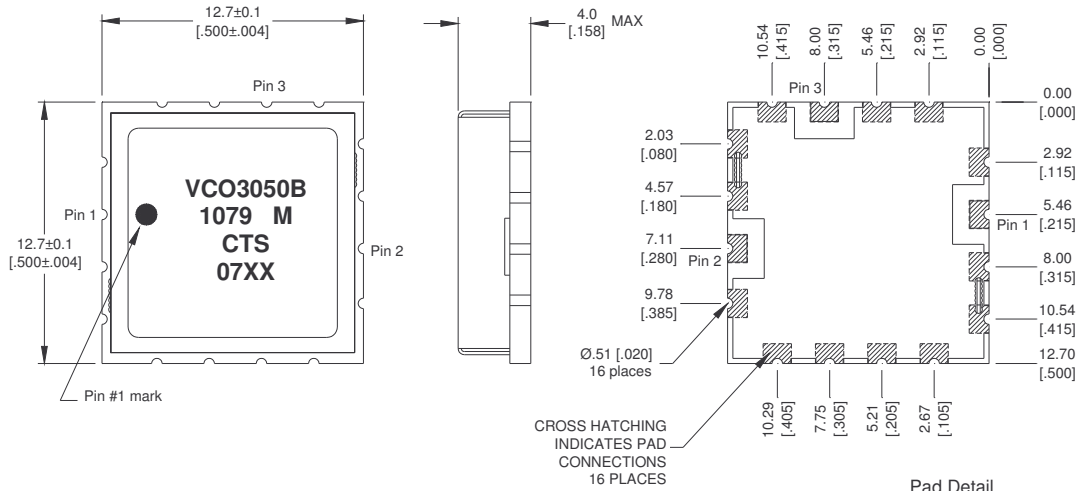


### ELECTRICAL SPECIFICATIONS

Parameter	Conditions & Remarks	Min	Typical	Max	Unit	
Operating Frequency	F <sub>OUT</sub>	1079	-	1114	MHz	
Supply Voltage	V <sub>CC</sub>	4.9	5.3	5.7	Vdc	
Supply Current	I <sub>CC</sub>	-	-	37	mA	
Operating Temperature Range	T <sub>OP</sub>	-35	-	+85	°C	
Storage Temperature Range	T <sub>STG</sub>	-40	-	+125	°C	
Tuning Voltage Range	V <sub>T</sub>	1.8	-	4.3	Vdc	
Tuning Sensitivity		20	25	33	MHz/V	
Power Output	50 Ohms	-0.5	2.5	5.5	dBm	
Pushing	(5.5V +/-0.5V)	-5	-	5	MHz/V	
Pulling	(VSWR = 1.67:1)	-2	-	2	MHz	
Harmonics		-	-20	-15	dBc	
Spurious response		-	-	-85	dBc	
<b>Note : This VCO guaranteed to Oscillate @ 0 volts. (Tuning voltage).</b>						
Phase Noise		100kHz	-	-108	-100	dBc/Hz
		400kHz	-	-	-125	dBc/Hz
		1000KHz	-	-152	-150	dBc/Hz

**1079 - 1114MHz VCO**

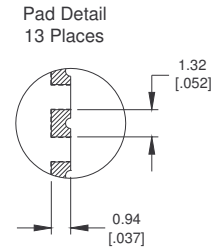
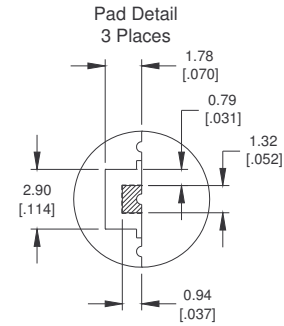
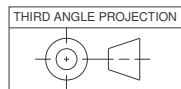
**MECHANICAL SPECIFICATIONS:**



Function table

Pin	Function
1	Vt
2	RF Output
3	Vcc
4-16	GND

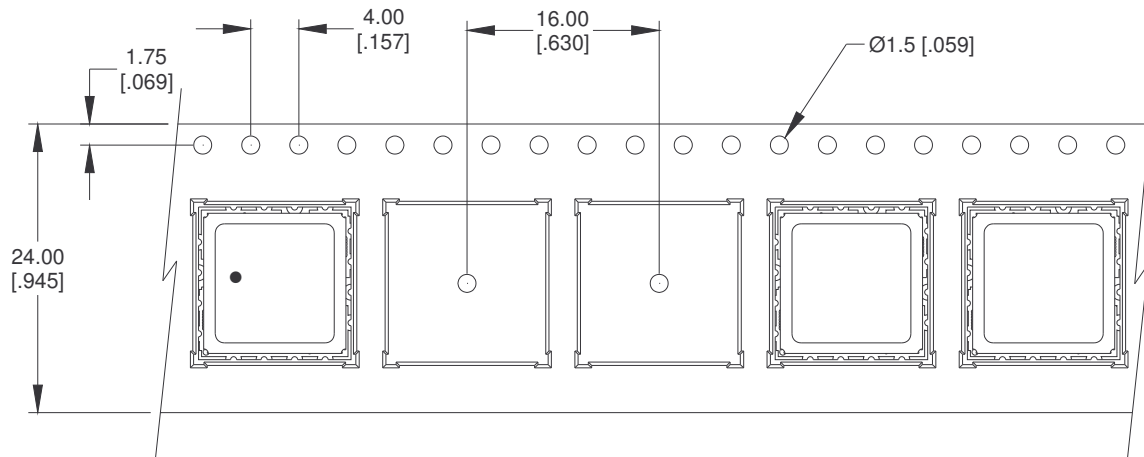
Note: The Lid/Sheild is grounded.



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:** -35 to +85 °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