

1850 – 1950MHz VCO

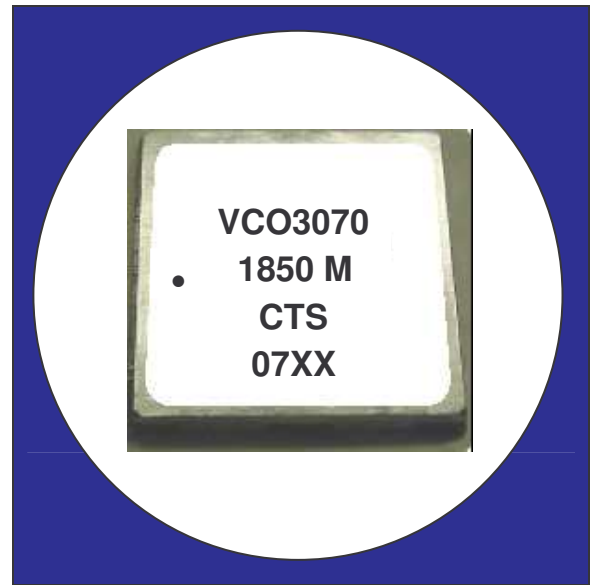
FEATURES

- Industry Standard 12.7x12.7mm SMT Footprint
- +5Vdc 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 VCO3070 is a high performance SMT VCO. It's low phase noise makes it the ideal choice for any wireless telecommunications system.

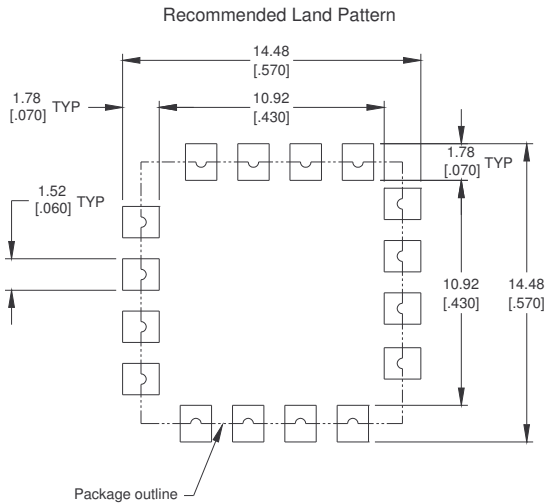
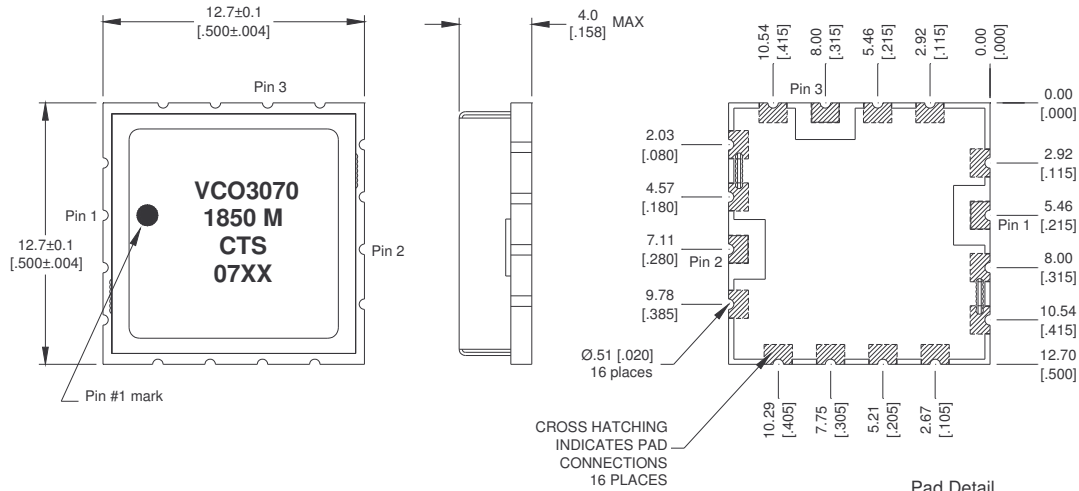
- See WWW.CTSCORP.COM for product patent status.



ELECTRICAL SPECIFICATIONS

Parameter	Conditions & Remarks	Min	Typical	Max	Unit
Operating Frequency	F _{OUT}	1850	-	1950	MHz
Supply Voltage	V _{CC}	4.75	5.0	5.25	Vdc
Supply Current	I _{CC}	-	12	16	mA
Operating Temperature Range	T _{OP}	-35	-	+85	°C
Storage Temperature Range	T _{STG}	-40	-	+125	°C
Tuning Voltage Range	V _T	1.0	-	6	Vdc
Tuning Sensitivity		20	35	50	MHz/V
Power Output		0	3	6	dBm
Pushing	(5.0V +/- 0.25V)	-	2	4	MHz
Pulling	(12db return loss)	-	2	5	MHz
Harmonic suppression	2 nd	-	-15	-10	dBc
Harmonic suppression	3 rd	-	-20	-10	dBc
Spurious response		-	-	-80	dBc
Phase Noise	10kHz	-	-93	-91	dBc/Hz
	100kHz	-	-120	-112	dBc/Hz
	1000KHz	-	-135	-132	dBc/Hz

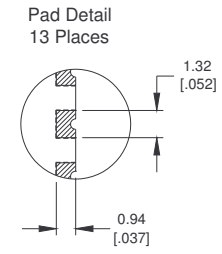
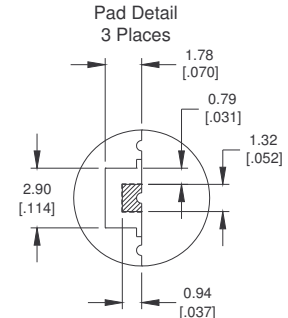
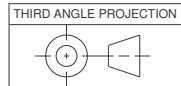
MECHANICAL SPECIFICATIONS:



Function table

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

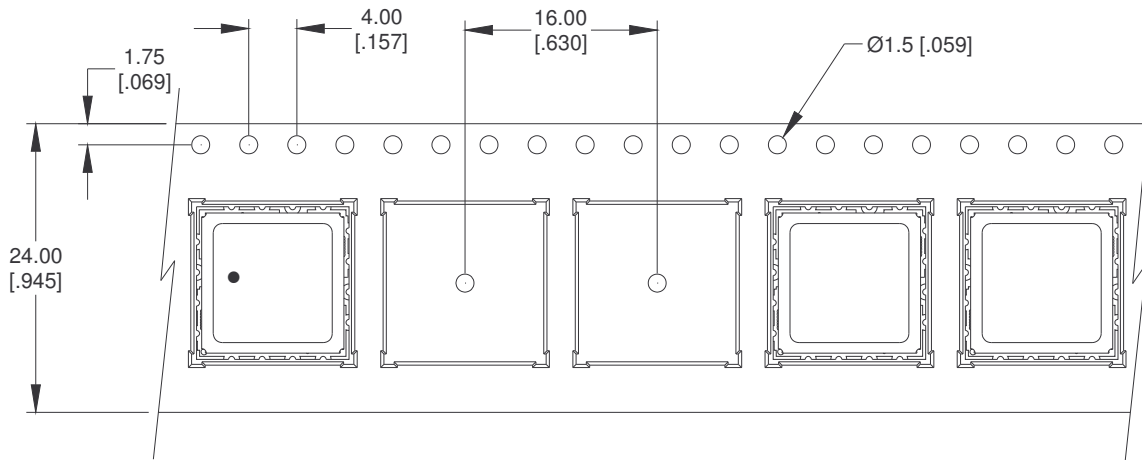
Note: The Lid/Sheild is grounded.



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