

1785 – 1900MHz VCO

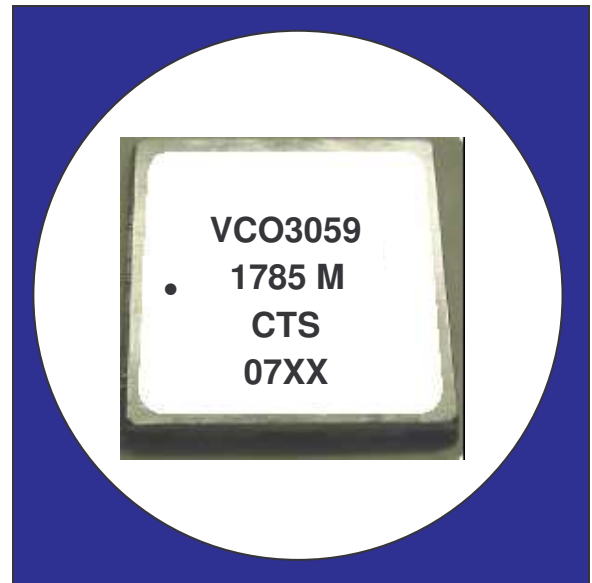
FEATURES

- Industry Standard 12.7x12.7mm SMT Footprint
- +4.75Vdc Supply Voltage
- -20°C to +85°C Temp. Range
- Low Phase Noise
- Tape & Reel Packaging
- Fully compliant to RoHS Directive 2002/95/EC

DESCRIPTION

The CTS VCO3059 is a high performance SMT VCO. It's low phase noise makes it the ideal choice for any wireless telecommunications system.

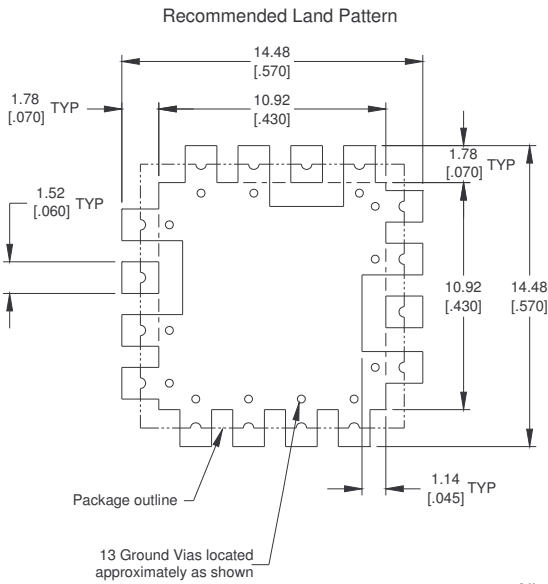
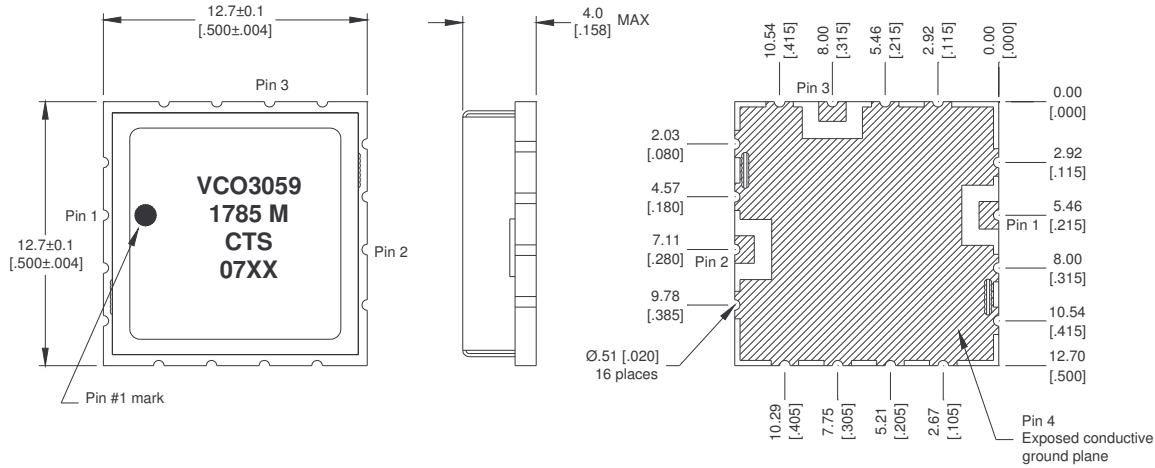
- See WWW.CTSCORP.COM for product patent status.



ELECTRICAL SPECIFICATIONS

Parameter	Conditions & Remarks	Min	Typical	Max	Unit
Operating Frequency	F _{OUT}	1785	-	1900	MHz
Supply Voltage	V _{CC}	4.5	4.75	5	Vdc
Supply Current	I _{CC}	-	-	28	mA
Operating Temperature Range	T _{OP}	-20	-	+85	°C
Storage Temperature Range	T _{STG}	-30	-	+85	°C
Tuning Voltage Range	V _T	0.5	-	4.5	Vdc
Tuning Sensitivity		-	38	-	MHz/V
Power Output	(RF Amplitude)	1	4	7	dBm
Pushing		-1	-	1	MHz/V
Pulling	(12db return loss in all phases)	-1	-	1	MHz p-p
Harmonics		-	-	-15	dBc
Spurious response		-	-	-80	dBc
Output Impedance		-	50	-	Ohms
Phase Noise	10kHz	-	-95	-93	dBc/Hz
	100kHz	-	-	-115	dBc/Hz
	1000KHz	-	-136	-133	dBc/Hz

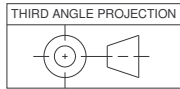
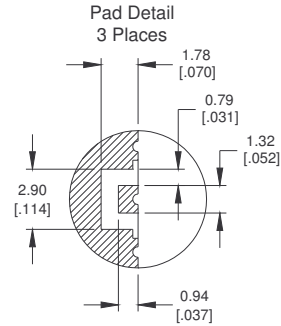
MECHANICAL SPECIFICATIONS:



Function table

Pin	Function
1	Vt
2	RF Output
3	Vcc
4	GND

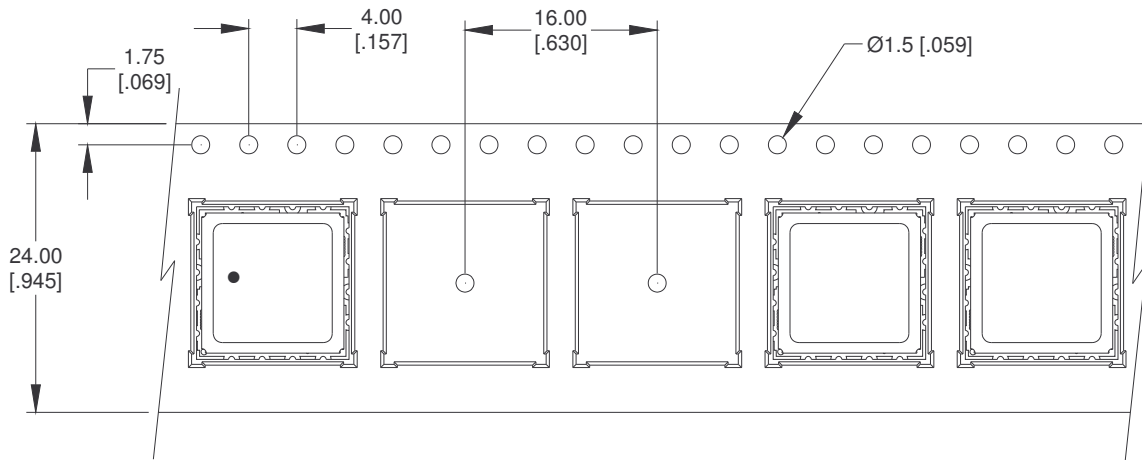
Note: The Lid/Sheild is grounded.



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: -20 to +85 °C.

Storage Temperature: -30 to +85 °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