

453 - 474MHz VCO

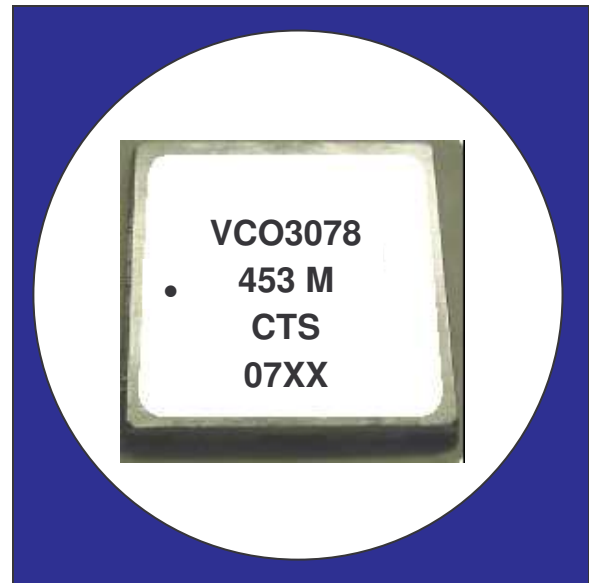
FEATURES

- Industry Standard 12.7x12.7mm SMT Footprint
- +5Vdc Supply Voltage
- -30 °C to +85 °C Temp. Range
- Low Phase Noise
- Tape & Reel Packaging
- Fully compliant to RoHS Directive 2002/95/EC

DESCRIPTION

The CTS VCO3078 is a single band high performance SMT VCO. Its low phase noise makes it the ideal choice for any wireless telecommunications system.

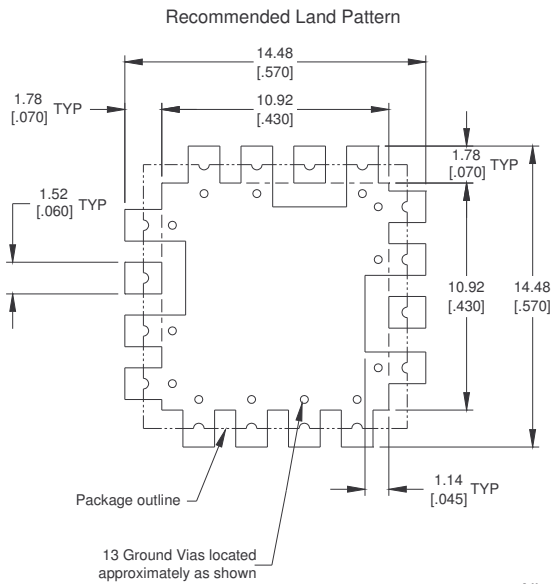
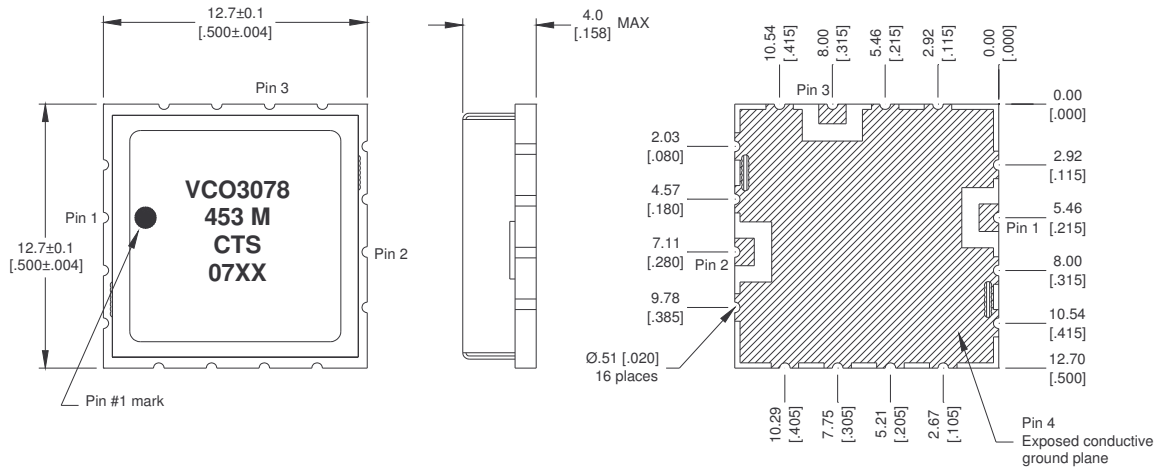
- See WWW.CTSCORP.COM for product patent status.



ELECTRICAL SPECIFICATIONS

Parameter	Conditions & Remarks	Min	Typical	Max	Unit
Operating Frequency	F _{OUT}	453	-	474	MHz
Supply Voltage	V _{CC}	4.75	5.0	5.25	Vdc
Supply Current	I _{CC}	-	-	22	mA
Operating Temperature Range	T _{OP}	-30	-	+85	°C
Storage Temperature Range	T _{STG}	-40	-	+85	°C
Tuning Voltage Range	V _T	0.7	-	4.2	Vdc
Tuning Sensitivity		-	-	19	MHz/V
Power Output	50 Ohms	3	6	9	dBm
Pushing	(5.0V +/-5%)	-200	-	200	KHz
Pulling	(VSWR 2:1 at all phases)	-200	-	200	KHz
Harmonic Spurious	(2nd & 3rd)	-	-	-30	dBc
Non-harmonic Spurious	<4.0 kHz	-	-	-50	dBc
Non-harmonic Spurious	>4.0 kHz	-	-	-85	dBc
Phase Noise	12.5KHz	-	-113	-110	dBc/Hz
	50kHz	-	-	-122	dBc/Hz
	100kHz	-	-	-129	dBc/Hz
	1MHz	-	-151	-149	dBc/Hz

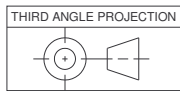
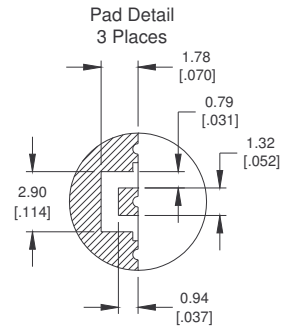
MECHANICAL SPECIFICATIONS:



Function table

Pin	Function
1	Vt
2	RF Output
3	Vcc
4	GND

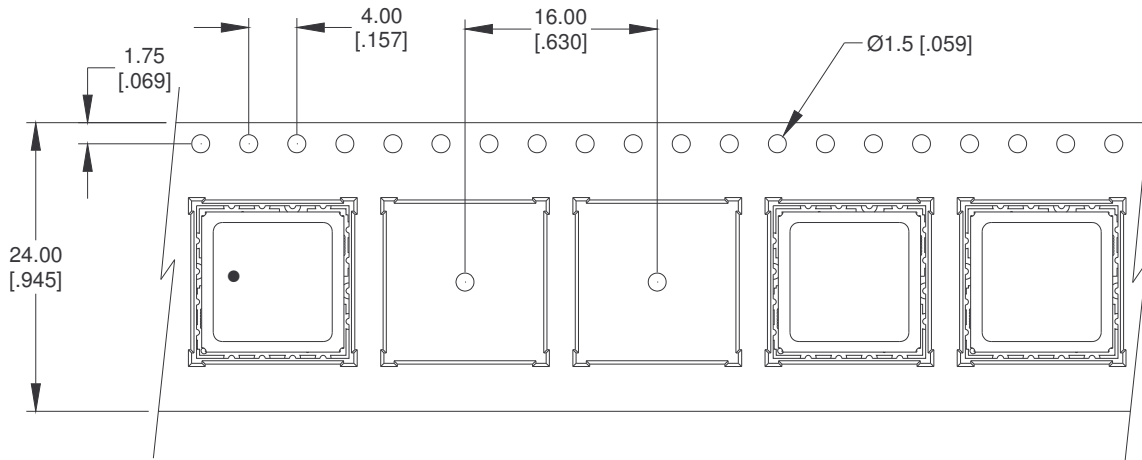
Note: The Lid/Sheild is grounded.



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.



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 All dimensions are Nominal

STANDARD ENVIRONMENTAL LIMITS:

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

Operating Temperature: -30 to +85 °C.

Storage Temperature: -40 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