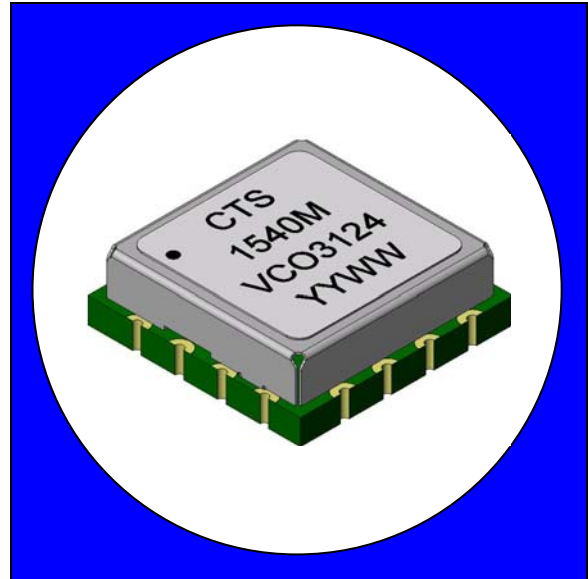


### FEATURES

- Industry Standard 12.7x12.7mm SMT Footprint
- 5.0Vdc Supply Voltage
- -35°C to +85°C Temp. Range
- Low Cost
- Low Phase Noise
- Tape & Reel Packaging
- Fully compliant to RoHS Directive 2002/95/EC

### DESCRIPTION

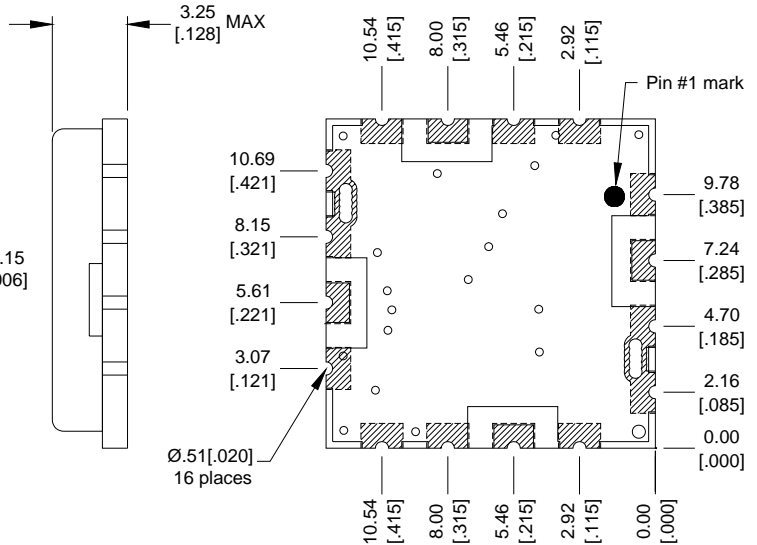
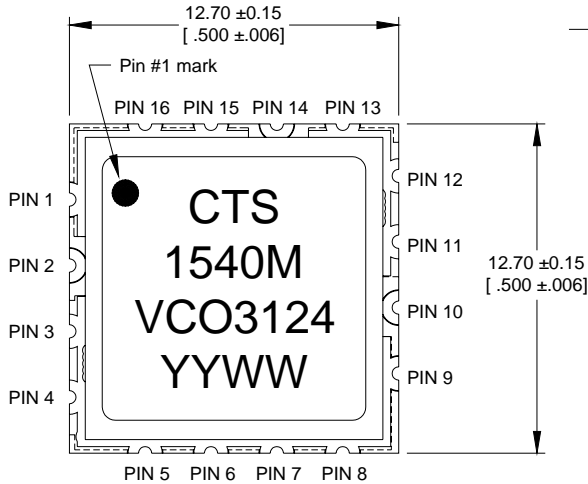
This CTS low cost, small size, high performance SMT VCO uses a high quality design, offering wide band performance and extremely low phase noise making it the ideal choice for any datacom or wireless telecommunications system.



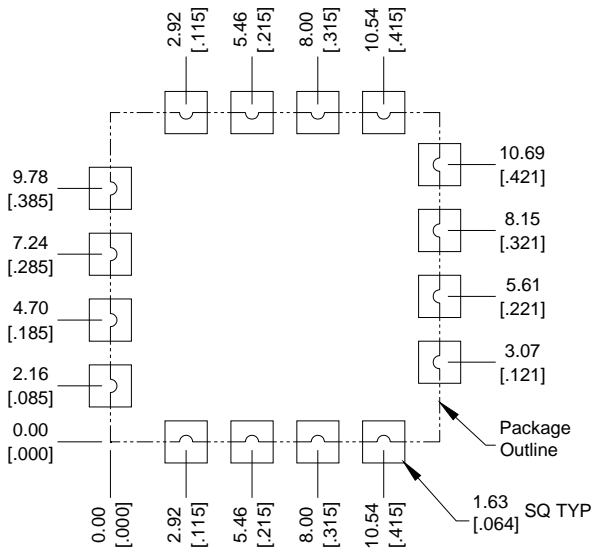
### ELECTRICAL SPECIFICATIONS

Parameter	Conditions & Remarks	Min	Typical	Max	Unit
Operating Frequency	$f_{OUT}$	1540	-	1615	MHz
Supply Voltage	$V_{CC}; \pm 5\%$	4.75	5.0	5.25	Vdc
Supply Current	$I_{CC}$	-	-	25	mA
Operating Temperature Range	$T_{OP}$	-35		+85	°C
Storage Temperature Range	$T_{STG}$	-55	-	+90	°C
Tuning Voltage Range	$V_T$	0.5	-	4.5	Vdc
Modulation Bandwidth	-3dB	1	-	-	MHz
Tuning Sensitivity	$F_L$ to $F_U$		34		MHz/V
Input Capacitance (max.)				50	pFd
Power Output	50 Ohms	-3.0	0.0	+3.0	dBm
Pushing	$V_{CC}$ min to $V_{CC}$ max	-	-	1	MHz/V
Pulling	-12dB	-	-	1	MHz
Output Port Impedance	Internal AC-Coupling	-	50	-	Ohm
Harmonics		-	-15	-12	dBc
Phase Noise@	10 KHz		-104		dBc/Hz
	100 KHz		-125		dBc/Hz
	800 KHz		-144		dBc/Hz

### MECHANICAL SPECIFICATIONS



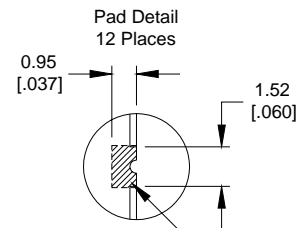
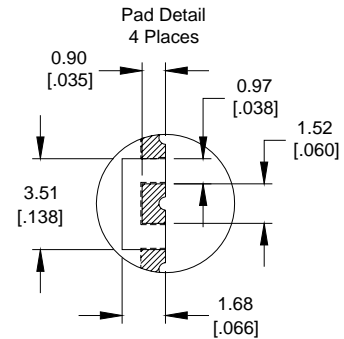
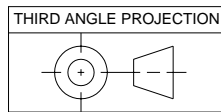
#### Recommended Land Pattern



#### Function Table

Pin	Function
2	Vt
10	RF Output
14	Vcc
1,3-9, 11-13, 15,16	GND

Note: The Lid/Sheild is grounded.



HATCHING INDICATES METALLIZATION EXPOSED BY RESIST MASK

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.

MAXIMUM SOLDERING PROFILE		
Temperature	>217°C	260°C (Absolute max temperature)
Time	2.5min	10 sec
Note: Part is not designed to be reflowed in an inverted position.		

#### MSL: level 1