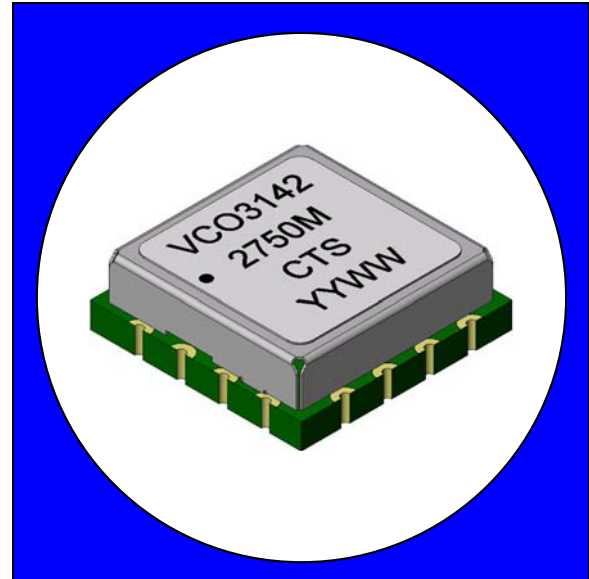


FEATURES

- Industry Standard 12.7x12.7mm SMT Footprint
- 5.0Vdc Supply Voltage
- -40°C to +85°C Temp. Range
- Low Cost
- Low Phase Noise
- Tape & Reel Packaging
- Fully compliant to RoHS Directive 2002/95/EC

DESCRIPTION

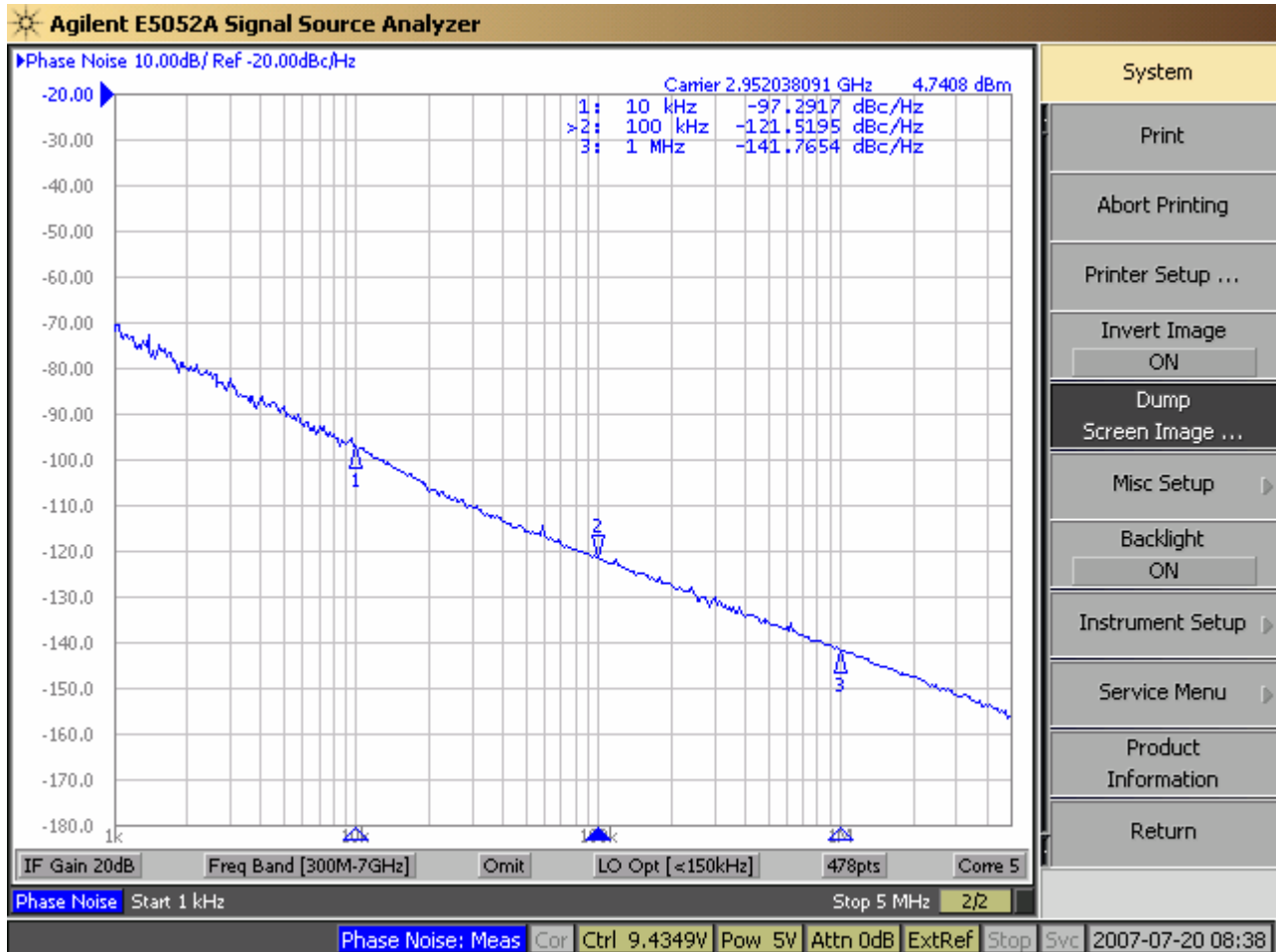
This CTS low cost, small size, high performance SMT VCO uses a high quality design, offering wide band performance and extremely low phase noise making it the ideal choice for any datacom or wireless telecommunications system.



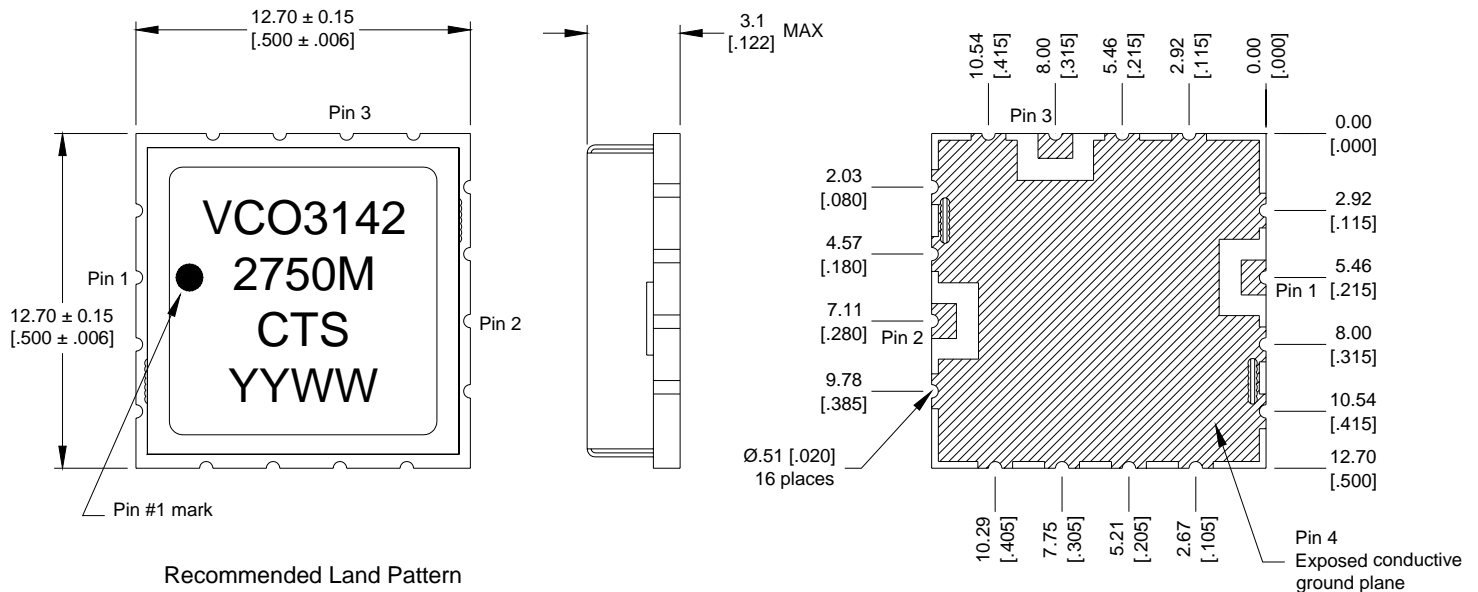
ELECTRICAL SPECIFICATIONS

Parameter	Conditions & Remarks	Min	Typical	Max	Unit
Operating Frequency	f_{OUT}	2750	-	2950	MHz
Supply Voltage	$V_{CC}; \pm 5\%$	4.75	5.0	5.25	Vdc
Supply Current	I_{CC}	-	-	40	mA
Operating Temperature Range	T_{OP}	-40		+85	°C
Storage Temperature Range	T_{STG}	-55	-	+90	°C
Tuning Voltage Range	V_T	1	-	10	Vdc
Modulation Bandwidth	-3dB	1	-	-	MHz
Tuning Sensitivity	F_L to F_U		28		MHz/V
Input Capacitance (max.)				50	pFd
Power Output	50 Ohms	+2.0	+5.0	+8.0	dBm
Pushing	V_{CC} min to V_{CC} max	-	4		MHz/V
Pulling	-12dB	-	3		MHz
Output Port Impedance	Internal AC-Coupling	-	50	-	Ohm
Harmonics		-	-	-15	dBc
Phase Noise@	10 KHz		-90		dBc/Hz
	100 KHz		-110		dBc/Hz
	1 Mhz		-130		dBc/Hz

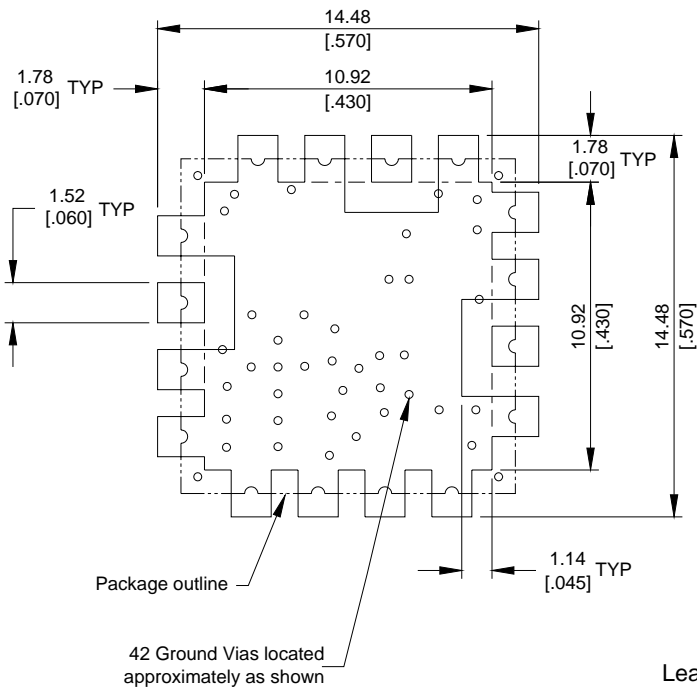
Typical Phase Noise @ 85°C



MECHANICAL SPECIFICATIONS



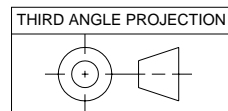
Recommended Land Pattern



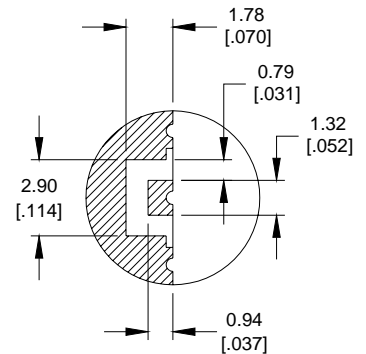
Function table

Pin	Function
1	Vt
2	RF Output
3	Vcc
4	GND

Note: The Lid/Sheild is grounded.



Pad Detail
3 Places



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

09-22-2008

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Revision A

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