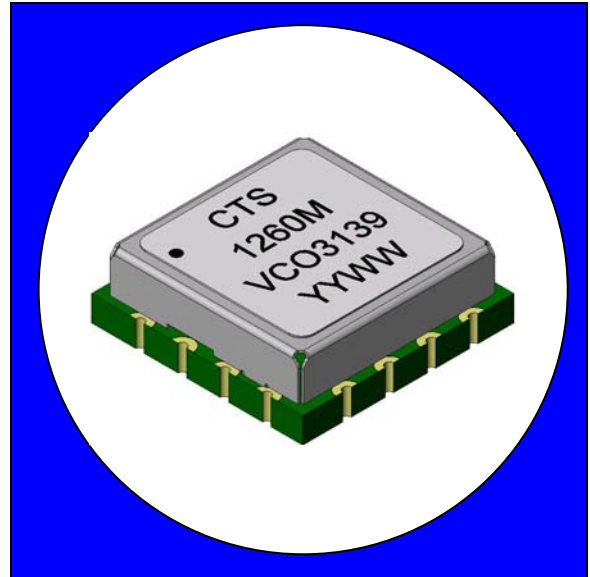


FEATURES

- 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

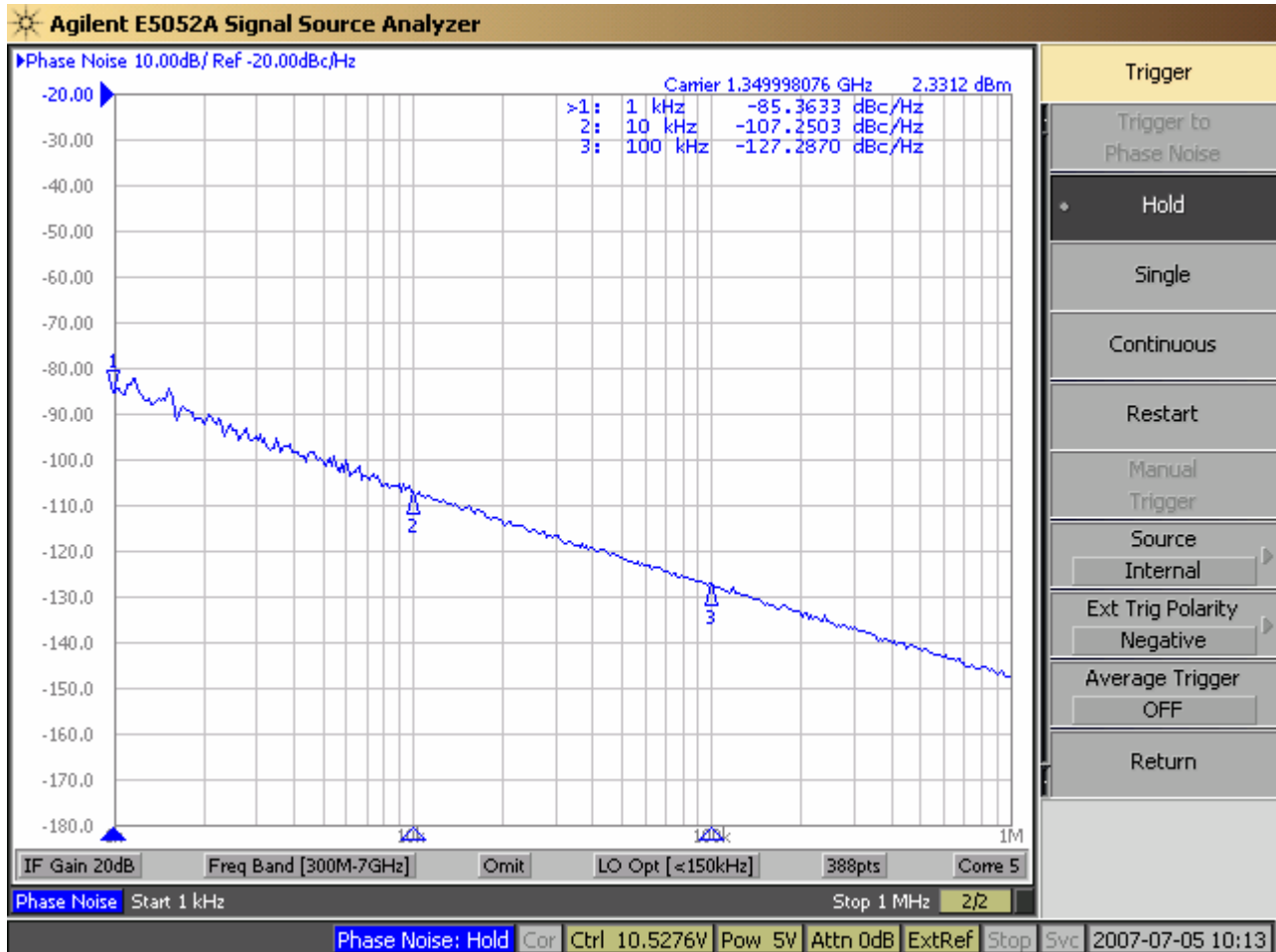
This CTS low cost, small size, high performance SMT VCO uses a high quality design, offering wide band performance and extremely low phase noise making it the ideal choice for any datacom or wireless telecommunications system.



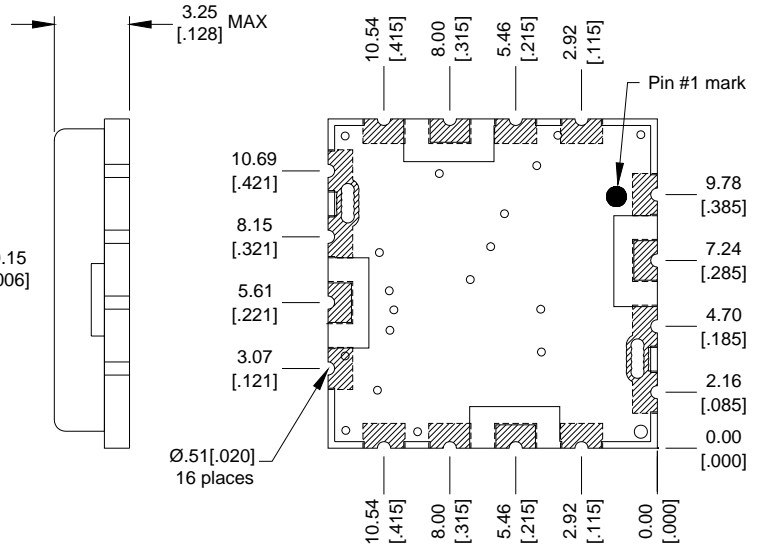
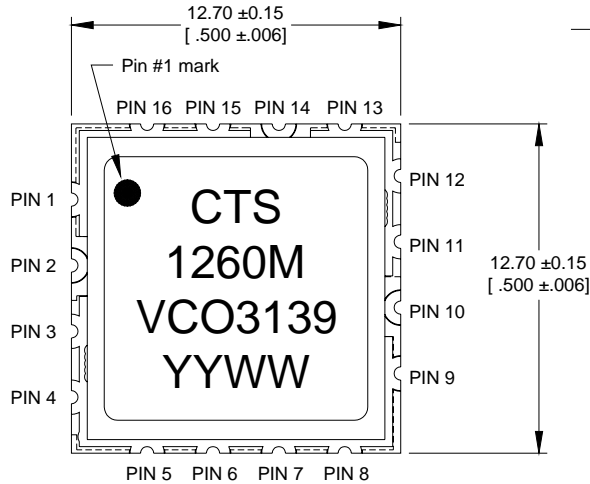
ELECTRICAL SPECIFICATIONS

| Parameter | Conditions & Remarks | Min | Typical | Max | Unit |
|-----------------------------|------------------------------|------|---------|------|--------|
| Operating Frequency | f_{OUT} | 1260 | - | 1350 | 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} | -40 | | +85 | °C |
| Storage Temperature Range | T_{STG} | -55 | - | +90 | °C |
| Tuning Voltage Range | V_T | 1.0 | - | 12.0 | Vdc |
| Modulation Bandwidth | -3dB | 1 | - | - | MHz |
| Tuning Sensitivity | F_L to F_U | | 10 | | MHz/V |
| Input Capacitance (max.) | | | | 50 | pFd |
| Power Output | 50 Ohms | 1.0 | 4.0 | 7.0 | dBm |
| Pushing | V_{CC} min to V_{CC} max | - | - | 2 | MHz/V |
| Pulling | -12dB | - | - | 2 | MHz |
| Output Port Impedance | Internal AC-Coupling | - | 50 | - | Ohm |
| Harmonics | | - | -30 | -20 | dBc |
| Phase Noise@ | | | | | |
| | 10 KHz | | -106 | | dBc/Hz |
| | 100 KHz | | -126 | | dBc/Hz |

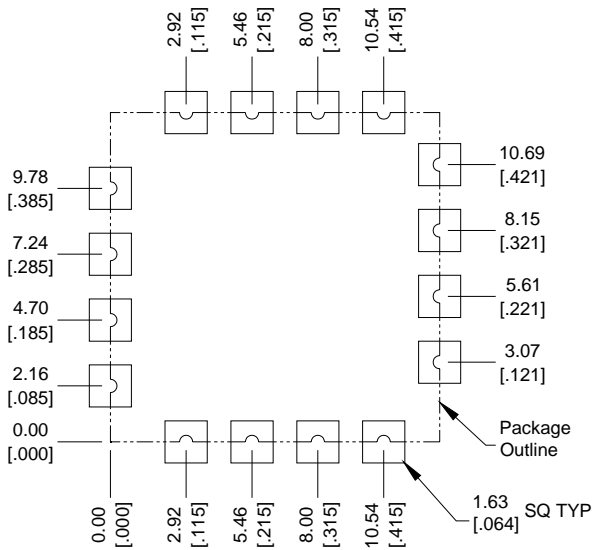
Typical Phase Noise * +85°C



MECHANICAL SPECIFICATIONS



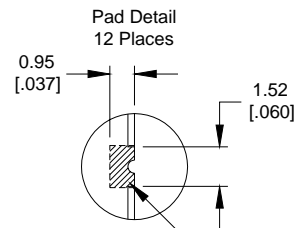
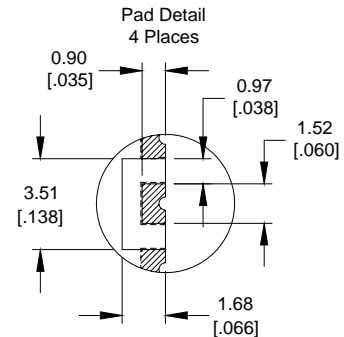
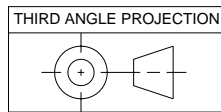
Recommended Land Pattern



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