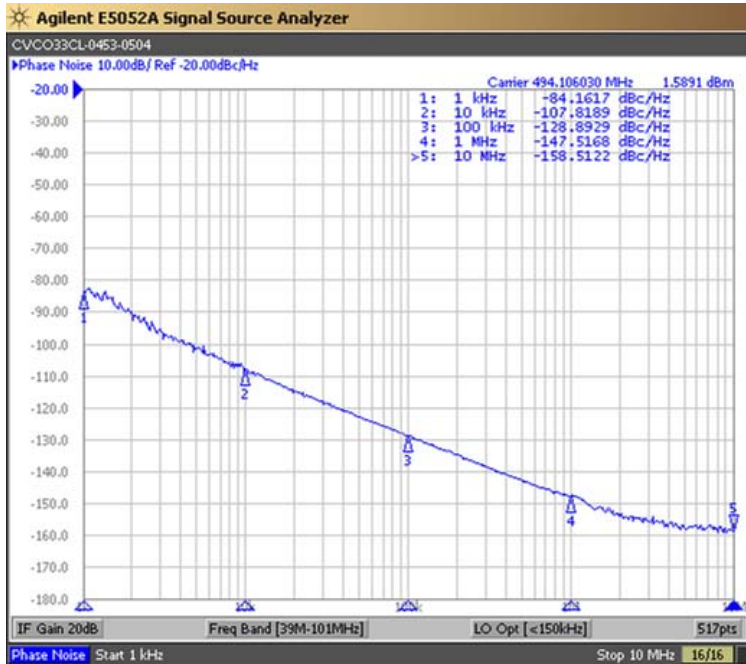


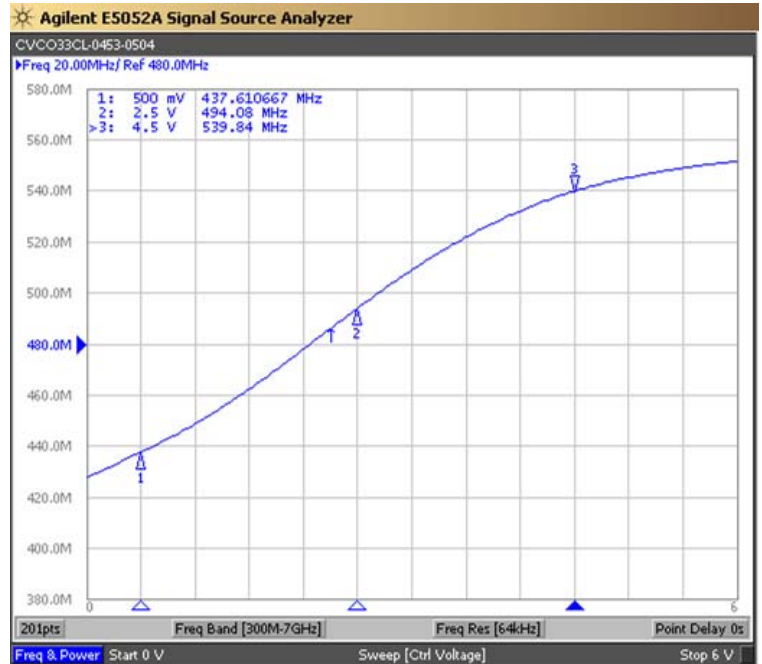


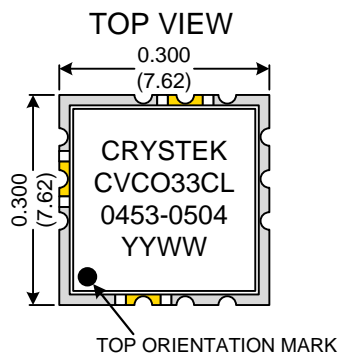
| PERFORMANCE SPECIFICATION                        | MIN  | TYP  | MAX  | UNITS        |
|--|------|------|------|--------------|
| Lower Frequency:                                 |      |      | 453  | MHz          |
| Upper Frequency:                                 | 504  |      |      | MHz          |
| Tuning Voltage:                                  | 0.5  |      | 4.5  | VDC          |
| Supply Voltage:                                  | 2.66 | 2.8  | 2.94 | VDC          |
| Output Power:                                    | -1.0 | +1.0 | +3.0 | dBm          |
| Supply Current:                                  |      | 15   | 22   | mA           |
| Harmonic Suppression (2 <sup>nd</sup> Harmonic): |      | -12  | -7   | dBc          |
| Pushing:   |      | 4.5  | 7.0  | MHz/V        |
| Pulling, all Phases:                             |      | 0.5  | 1.0  | MHz pk-pk    |
| Tuning Sensitivity:                              |      | 24   |      | MHz/V        |
| Phase Noise @ 10kHz offset:                      |      | -109 | -107 | dBc/Hz       |
| Phase Noise @ 100kHz offset:                     |      | -131 | -127 | dBc/Hz       |
| Load Impedance:                                  |      | 50   |      | $\Omega$     |
| Input Capacitance:                               |      |      | 150  | pF           |
| Operating Temperature Range:                     | -40  |      | +85  | $^{\circ}$ C |
| Storage Temperature Range:                       | -45  |      | +90  | $^{\circ}$ C |

Phase Noise (1 Hz BW, Typical)



Tuning Curve (Typical)

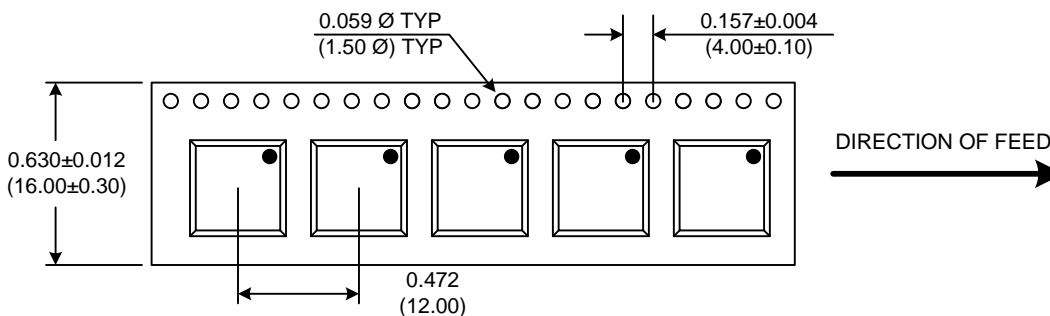




| Pad    | Connection |
|--------|------------|
| 1      | Vt         |
| 8      | RF-OUTPUT  |
| 11     | Vcc        |
| Others | GROUND     |

- Unless otherwise specified, Dimensions are in:  $\frac{IN}{(mm)}$
- Pad Location Dimensions are in: Inches

**TAPE AND REEL**



Drawing not to scale

**Product Control:**

|                      |                    |               |             |
|----------------------|--------------------|---------------|-------------|
| Crystek Part Number: | CVCO33CL-0453-0504 | Release Date: | 30-May-2013 |
| Revision Level:      | F                  | Responsible:  | C. Vales    |

Specification is subject to change without notice

