



# CONNOR-WINFIELD CORPORATION

AURORA, IL. 60505  
PHONE (630) 851-4722  
FAX (630) 851-5040

## HIGH FREQUENCY VCXO WITH TRI-STATE

| SPECIFICATIONS                                    | HVT54-100                                      | HVT54-150       | HVT54-200       |
|---|--|-----------------|-----------------|
| Frequency Range (Fo)                              | 30MHz to 100MHz                                | 30MHz to 100MHz | 30MHz to 65MHz  |
| Frequency Stability<br>(Voltage Control= 2.50Vdc) |  |                 |                 |
| Vs Temperature                                    | ±20ppm   |                 |                 |
| Vs Calibration @25°C                              | ±20ppm   |                 |                 |
| Vs Aging (15yrs)                                  | ±10ppm   |                 |                 |
| Total Frequency Tolerance                         | ±50ppm Maximum (Referenced to Fo)              |                 |                 |
| Temperature Range                                 | 0°C to +70°C                                   |                 |                 |
| Waveform  | CMOS Squarewave, TTL Compatible                |                 |                 |
| Load  | 50pF Maximum                                   |                 |                 |
| Voltage   |  |                 |                 |
| Voh   | 4.5V Minimum                                   |                 |                 |
| Vol   | 0.5V Maximum                                   |                 |                 |
| Current   |  |                 |                 |
| Ioh   | -16mA  |                 |                 |
| Iol   | 16mA   |                 |                 |
| Duty Cycle  | 40/60 Maximum                                  |                 |                 |
| Rise/Fall Time                                    | 3nS Maximum                                    |                 |                 |
| Jitter (RMS)                                      | 5pS Maximum                                    |                 |                 |
| SSB Phase Noise (Typical)                         | -65dBc/Hz @ 10Hz , -130dBc/Hz @10KHz           |                 |                 |
| Frequency Control                                 |  |                 |                 |
| Pullability @25°C<br>(Referenced to Fo)           | ±50ppm Minimum                                 | ±75ppm Minimum  | ±100ppm Minimum |
| Absolute Pull Range                               | ±20ppm Minimum                                 | ±45ppm Minimum  | ±70ppm Minimum  |
| Slope   | Positive Transfer Characteristic               |                 |                 |
| Control Voltage                                   | 0.5Vdc to 4.5Vdc                               |                 |                 |
| Monotonic Linearity                               | < ±10%   |                 |                 |
| Input Impedance                                   | ≥ 50K ohms                                     |                 |                 |
| Modulation Bandwidth                              | ≥ 15KHz  |                 |                 |
| Input   | Output E/D Time                                |                 |                 |
| Enable  | Vih  |                 |                 |
| Disable   | Vil  |                 |                 |
| No connection                                     | Output is enabled with no connection on pin 3  |                 |                 |
| Supply Voltage (Vcc)                              | +5Vdc ±5%                                      |                 |                 |
| Supply Current                                    | 50mA Max <50MHz , 70mA Max <100MHz             |                 |                 |
| Package   | All metal, hermetically sealed, welded package |                 |                 |

**WARNING!** Do not insert oscillator into a hot circuit. Failure to comply will result in damage to oscillator.

Specifications subject to change without notice

BULLETIN #: VX190  
PAGE 1 OF 2

REV: 02  
DATE: 6/12/98

ISSUED BY: \_\_\_\_\_

Dimensional Tolerance: ±.02"  
±.005"



# CONNOR-WINFIELD CORPORATION

AURORA, IL. 60505

PHONE (630) 851-4722

FAX (630) 851-5040

## 14 PIN VCXO OSCILLATOR

EXAMPLE MODEL NUMBER:

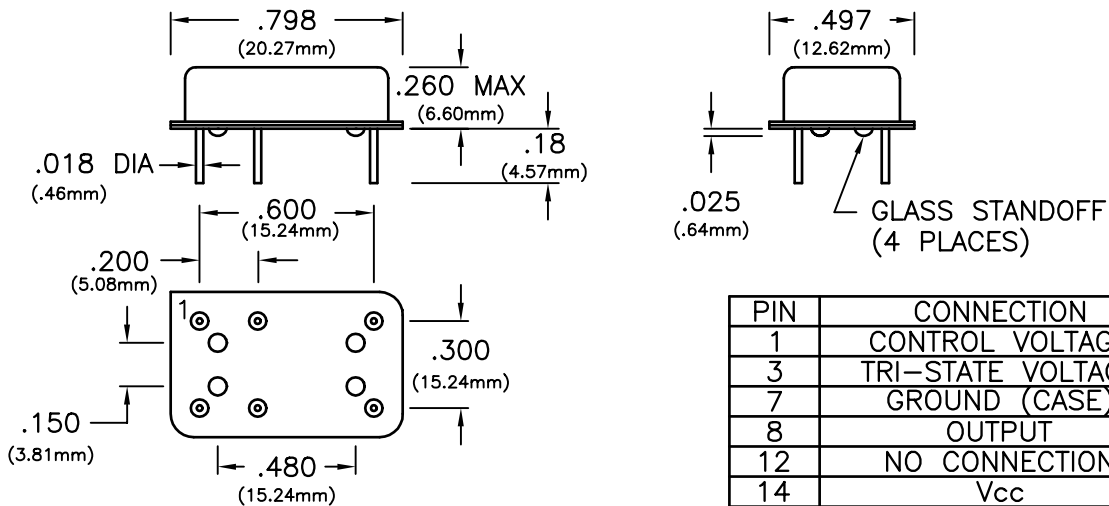
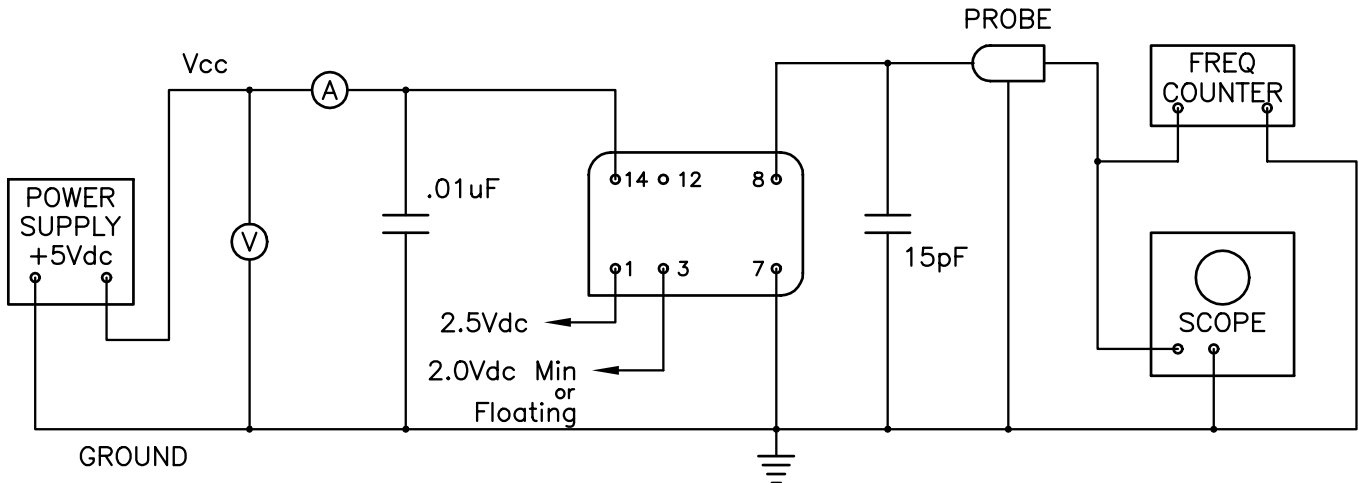
H V T 5 4 - 1 0 0 / 4 4 . 7 3 6 M H z

VCXO SERIES

MINIMUM DEVIATION OF  
±50ppm FROM 0.5  
TO 4.5Vdc CONTROL  
VOLTAGE.

CENTER FREQUENCY

### TEST CIRCUIT



| PIN | CONNECTION        |
|-----|-------------------|
| 1   | CONTROL VOLTAGE   |
| 3   | TRI-STATE VOLTAGE |
| 7   | GROUND (CASE)     |
| 8   | OUTPUT            |
| 12  | NO CONNECTION     |
| 14  | Vcc               |

Specifications subject to change without notice

BULLETIN #: VX190  
PAGE 2 OF 2

REV: 02  
DATE: 6/12/98

ISSUED BY: \_\_\_\_\_

Dimensional Tolerance: ±.02"  
±.005"