

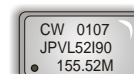
CRYSTAL CONTROLLED OSCILLATORS

3.3V PECL VCXO

SPECIFICATIONS

JPVL52I90

CENTER FREQUENCY (Fo)	155.52MHz
FREQUENCY STABILITY (1.65Vdc Pin 1)	
Vs Temperature	±20ppm Typical
Vs Calibration @ 25°C	±20ppm Typical
Vs Aging (10 yrs)	±10ppm
Total	±50ppm Maximum (Referenced to Fo @ 1.65Vdc pin 1)
TEMPERATURE RANGE	0°C to +70°C
OUTPUT	
Waveform	Low Voltage PECL Squarewave
Load	50 Ohms Terminated into Vcc-2 or Thevenin equivalent
Voltage Voh	2.275V Minimum
Vol	1.68V Maximum
Duty Cycle	45/55 Maximum (Both outputs)
Rise/Fall Time	1.0nS Maximum
Jitter	1.0ps RMS Maximum over 12kHz to 20MHz bandwidth 5.0ps RMS Maximum over 10Hz to 20MHz bandwidth
SSB Phase Noise (Typical)	-80dBc/Hz @ 100Hz , -130dBc/Hz @ 10kHz
FREQUENCY CONTROL	
Control Voltage	0.3Vdc to 3.0Vdc
Pullability @ 25°C (Referenced to 1.65V freq.)	Minimum pull sufficient to meet APR below ±90ppm Maximum
Absolute Pull Range (APR)	±25ppm Minimum
Slope	Positive
Linearity	±10% Maximum
Modulation Bandwidth	10kHz Minimum
SUPPLY VOLTAGE (Vcc)	3.3Vdc ±5%
SUPPLY CURRENT	80mA Maximum
PACKAGE	All metal, hermetically sealed, welded package



DESCRIPTION

The Connor-Winfield JPVL52I90 is a surface mount 3.3V voltage controlled crystal oscillator (VCXO) with an LVPECL differential output. Based on a fundamental mode crystal, the JPVL52I90 is designed for phased lock loop applications requiring low jitter and tight stability.

FEATURES

- 3.3V OPERATION
- LOW JITTER <1ps RMS
- LVPECL DIFFERENTIAL OUTPUTS
- ±25PPM ABSOLUTE PULL RANGE
- GULL WING STYLE SURFACE MOUNT

ORDERING INFORMATION

JPVL52I90 - 155.52MHz

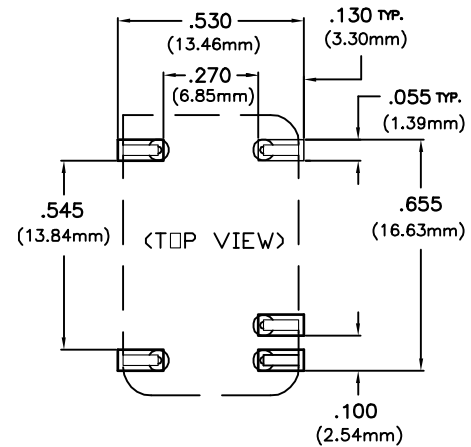
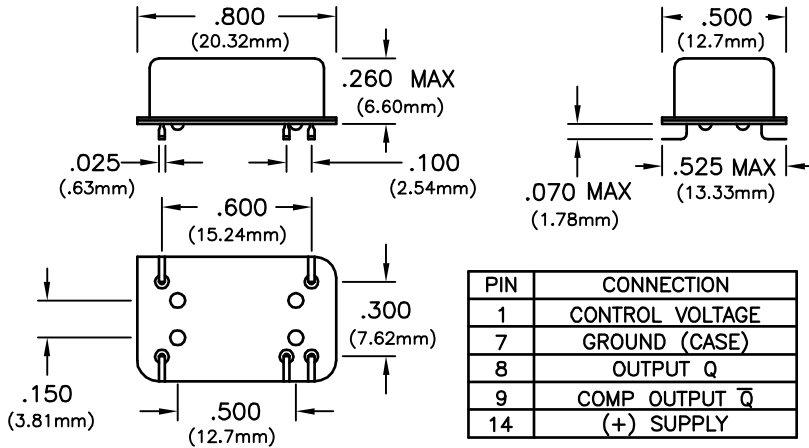
VCXO
SERIES

CENTER
FREQUENCY

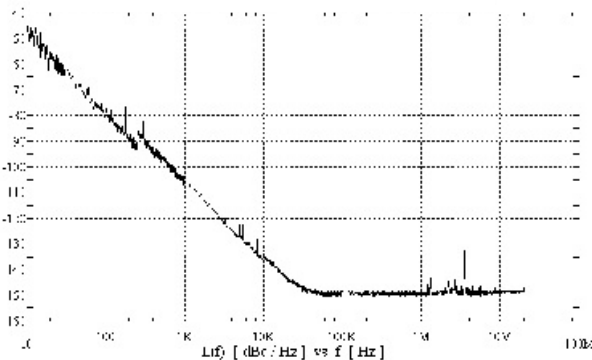
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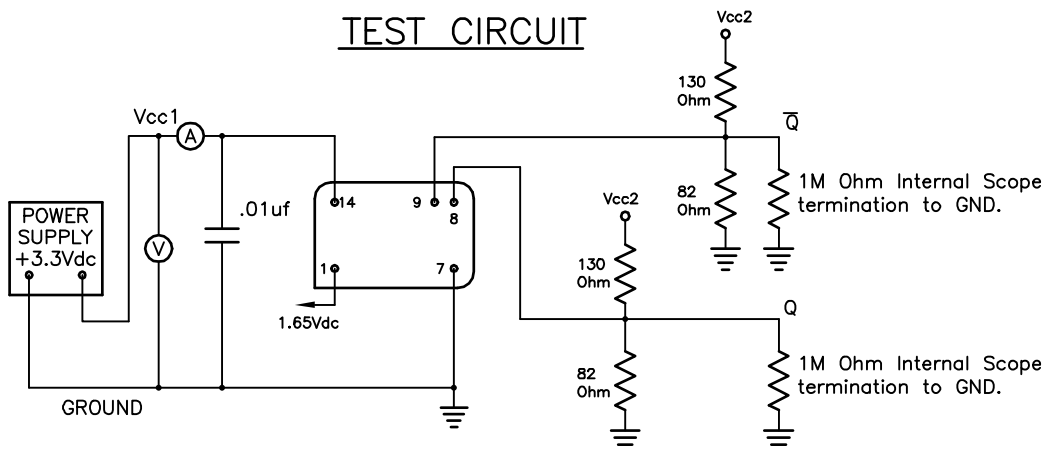
SUGGESTED PAD LAYOUT



TYPICAL PHASE NOISE



TEST CIRCUIT



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