

ABLNO Series, Ultra-Low Phase Noise; Fixed & Voltage Controlled Crystal Oscillators



ABLNO – Ultra-Low Phase Noise and rms jitter & economical.....

ABRACON's ABLNO series offers an Ultra-Low Phase Noise Fixed Clock Oscillator (XO) and Voltage Controlled Crystal Oscillator (VCXO's), in industry standard 9x14mm package. These devices are designed with High "Q", 3rd Overtone AT-Cut Quartz Blanks, enabling exceptionally clean, close-to-the-carrier phase noise. With 75fs maximum rms jitter over 12 kHz to 20MHz Bandwidth @ 100MHz carrier, ABLNO offers best-in-class jitter performance at an economical price point.

Key Features:

- Ultra-Low Phase Noise & Exceptionally low rms jitter; 100% tested at room temperature
- Can be used as a Platform Device followed by a simple division scheme to generate $\div 2$ & $\div 4$ frequencies. For instance, 100MHz ABLNO can be utilized to generate 100MHz, 50MHz & 25MHz on-board references
- Abracon is also offering an Evaluation Board to assist design engineers in evaluating $\div 1$, $\div 2$, $\div 4$ & $\div 8$ frequencies
- Industry leading frequency stability over temperature, without temperature compensation
- Linear & Monotonic Frequency Pull
- Exceptional long-term Aging
- Guaranteed ALL Inclusive Frequency Stability of ± 28 ppm over 10-year product life

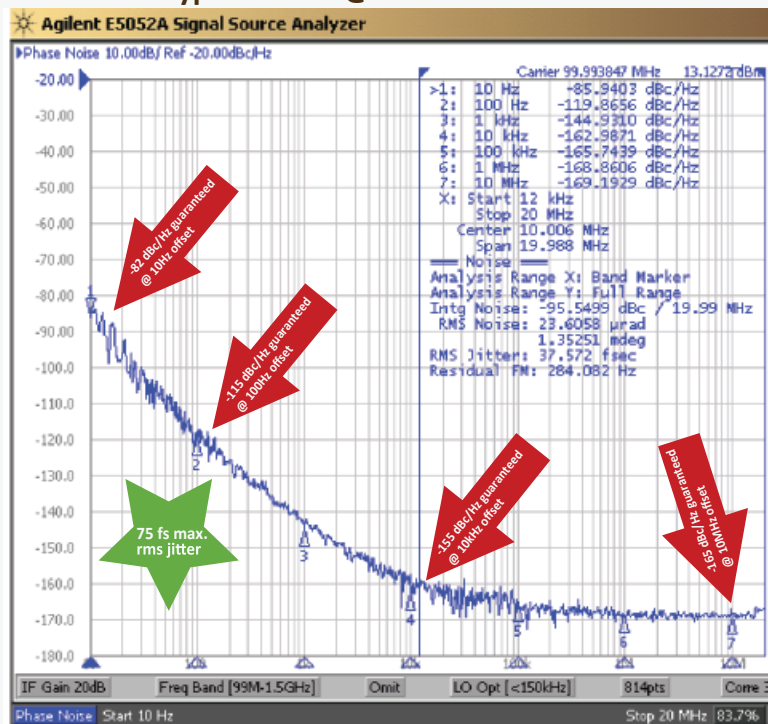
What ABLNO series offers designers?

- High "Q", 3rd Overtone Crystal based, Ultra-Low Phase Noise -162 dBc/Hz Typ. and -155dBc/Hz guaranteed @ 10kHz offset, at 100MHz carrier
- Standard LVCMOS RF Output
- Wide Operating Temperature (-40°C to +85°C)
- ± 28 ppm Max. All inclusive Stability (including Aging) over 10-years
- Available Frequency range from 50MHz to 150MHz (15-standard frequencies)
- 9.2 x 14.8mm RoHS Compliant SMT package

Applications:

- Satellite Modem Communication Systems
- COTS - Military communications
- Low Phase Noise Signal Sources
- High Definition TV
- Test & Measurement
- Ultra-Low Jitter RF Communication Circuitry

Typical Noise @ 100MHz Carrier



Links and Resources:

[ABLNO Datasheet Link](#)

[ABLNO-EVAL Datasheet Link](#)