

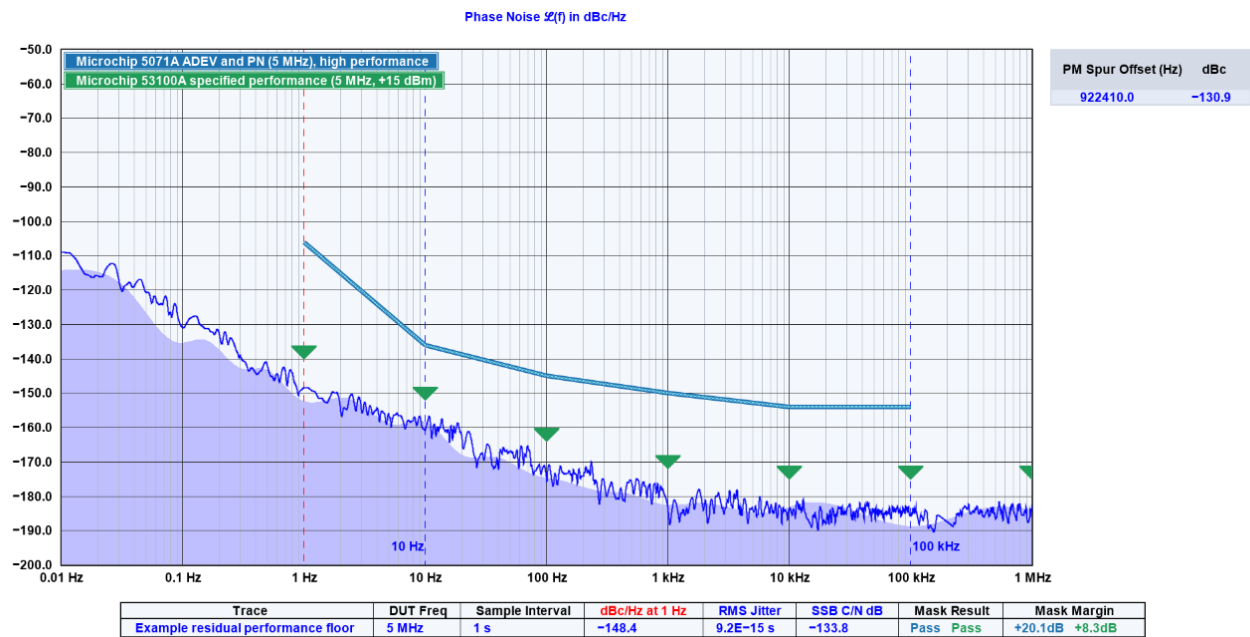
53100A PHASE NOISE ANALYZER

Learn About the 53100A

The 53100A measures the amplitude, phase and frequency stability of high-performance RF sources. It tells you everything you need to know about the stability characteristics of your devices at timescales ranging from femtoseconds to days. The 53100A can be used on a bench-top or embedded into rackmount Automated Test Equipment (ATE) systems. Its small form factor and industry-leading measurement speed makes this test set versatile for multiple applications.

Expanding upon the heritage of the 3120A and 51XXA series of instruments, the 53100A makes fast yet accurate Single Side Band (SSB) phase noise and Allan Deviation (ADEV) measurements at a fraction of the cost of other solutions. Featuring an improved design and advancements in manufacturing, the 53100A offers improvements in reliability and performance over predecessor technologies.

53100A Phase Noise Analyzer Chart



53100A PHASE NOISE ANALYZER

Key Features

- Internal Reference (IR) options for OCXOs and atomic clocks
- ADEV typically less than $5\text{E-}15$ at $t = 1\text{s}$; $1\text{E-}16$ at $t = 1000\text{s}$
- Measures up to three devices simultaneously
- Close-to-carrier phase noise and AM noise at offsets from 0.001 Hz
- Single- or dual-reference oscillator inputs allow cross-correlation measurements with noise floor approaching -175 dBc/Hz
- Modified Allan Deviation (MDEV), Hadamard Deviation (HDEV) and Time Deviation (TDEV)
- Jitter, residual FM and SSB carrier/noise ratio
- Independent input and reference frequencies from 1 to 200 MHz
- No phase locking or measurement calibration required



53100A Test Set Video

Watch this short video to learn about the capabilities of the 53100A Phase Noise Analyzer.

