

PNCS-1 Phase Noise Clock Standard

1 GHz



The PNCS-1 Phase Noise Clock Standard provides an ultra-low phase noise 1 GHz sinewave that can be used as a phase noise reference standard for testing spectrum analyzer phase noise performance.

The PNCS-1 is also well suited for use as a system clock for ADCs and DACs, providing a clean reference for optimal performance.

For low phase noise RF applications, the PNCS-1 can be used as a reference for high speed PFDs, or multiplied to higher frequencies for use in translation loop architectures.

SPECIFICATIONS

| OUTPUT FREQUENCY | 1 GHz Nominal with 1.5 ppm rear panel frequency adjustment RF Input Impedance (SMA connector): 50Ω nominal |
|------------------------------------|---|
| OUTPUT AMPLITUDE | +10dBm (± 2dB) |
| HARMONICS | -35dBc Typical |
| OPERATING TEMPERATURE (AMBIENT) | 50°F to 95°F (10°C to +35°C) |
| SIZE AND WEIGHT | 6.5" x 3.2" x 1.1" (259mm x 183mm x 55mm), 8.96 oz. (256.5 g) |
| POWER CONSUMPTION | 4.5 watts sourced from the supplied AC/DC 13.5V wall adapter |
| ECCN | 3A001.b.10 |

SSB PHASE NOISE AT 1 GHz CENTER FREQUENCYOffset FrequencydBc/Hz10 Hz-82100 Hz-1161 kHz-138

| 10 kHz | -147 |
|---------|------|
| 100 kHz | -148 |
| 1 MHz | -149 |

