

NR7005 *pico*POD

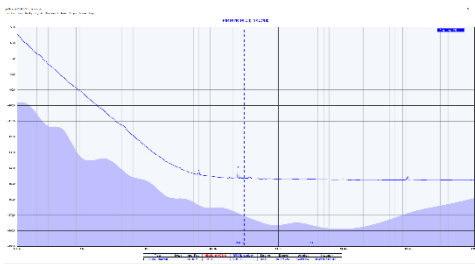
OCXO Reference Locks to an External PPS



The NR7005 *pico*POD is a high-performance reference in an ultra-compact package that affords simple system integration.

The *pico*POD is just 2"x2"x0.9" and requires only a 5 Vdc source. Outputs are a 9 dBm sinewave or LVCMOS 10 MHz output. *pico*PO locks to an external pulse (PPS).

A low phase noise OCXO at -155dBc/Hz@1000Hz provides a holdover stability of ± 100 ppb/year.



Low Power Consumption

Steady state power < 0.6W. With a single 5V input, the *pico*POD provides active antenna power at 3.5V (35mA).

Locks to an External PPS

External PPS as timing reference to lock 10 MHz OCXO.

Auto Cal

The unit stores the temperature/time performance of the holdover crystal multiple times per day. If PPS is lost, the unit uses the last best-known compensation.

Technical Specifications

| | |
|--------------------------------|---|
| 10 MHz sine | 8 ±2 dBm ,50 Ohm - BNC |
| Harmonics | Less than -30 dBc |
| Locked stability (AD) | <~E-12 after 1000 seconds to source |
| First year frequency stability | ±100 ppb (long-term unlocked) |
| Temperature stability | ±300 ppb (unlocked) |
| Yearly aging | ±100ppb (unlocked) |
| PPS Input | |
| Amplitude | 3.3 Volt CMOS |
| Minimum Pulse width | 10 usec |
| Input impedance | 1 kOhm |
| Secondary Channel | Derived from 200 MHz master oscillator locked to 10 MHz. Sub 1 Hz to 25 MHz |
| | Contact factory for valid synthesis values |
| | Output impedance is 200 Ohm. |
| Power | 5 to 6 VDC Peak power < 3 watts, steady state < 2 watts |
| Power connector | On ten pin connector |
| | |
| Mounting | 4 -#4-40 threaded mounting holes |
| | |
| Chassis | Aluminum |
| | |
| | |

Environmental and Mechanical

| | |
|-----------------------|---|
| Operating temperature | -20 to 50°C non-condensing (extended temperature range available) |
| Storage temperature | -40 to 70°C |
| Width | 2" |
| Depth | 2" (exclusive of connectors) |
| Height | 0.9" |
| Weight | <3 oz |

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