



# Issue 2: 27th January 2023

#### Features

- Temperature stability locked to ± 0.001ppb long term
- Low phase noise
- Frequency 10.0MHz
- SMA connector interface
- The flexible nature of the design means that variations to suit almost any application can be developed to meet individual customer requirements

#### Specifications

- Temperature stability unlocked: ±20ppb over (-40 to +70)°C
- Output: Sinewave +7dBm
- Voltage: 5.0V 12V
- Warm Up Current: 750mA 330 mA
- Quiescent current: 430mA 190 mA

#### Phase Noise (typical)

- F0<sub>0</sub>+10Hz -120 dBc/Hz
- F0<sub>0</sub>+100Hz -140 dBc/Hz
- F0<sub>0</sub>+1KHz -155 dBc/Hz
- F0<sub>0</sub>+10KHz -165 dBc/Hz
- F0<sub>0</sub>+100KHz -168 dBc/Hz

#### Voltage / Load change

- ±5% supply voltage change: ±2ppb
- ±10% load change: ±5ppb

#### Ageing:

Based on 10MHz unit after 30 days continuous operation:

- Per day: ±0.1ppb max.
- Per year: ±50ppb max.
- Warm up time: 5 minutes to within 0.1ppm

#### 1pps accuracy:

±50ns

#### Antenna

Typical Gain +25dBm

#### Environmental

- Electrostatic-Sensitive Device (ESD)
- Storage Temperature Range: (-40 to +125)°C
- Mechanical shock: MIL standard 202F, method 213, condition J
- Thermal shock: MIL standard 202F, method 107, condition A
- Vibration: MIL standard 202F, method 204, condition B



# Dimensions (mm)







Lock Status

GPS antenna #1 Lock 1





- Solderability: 5 seconds maximum at 230°C
- 3 seconds maximum at 350°C

#### Compliance

- RoHS Status (2011/65/EU) Compliant
- REACH Status Compliant

## Packaging

Pack Style: Bulk

# **Ordering Information**

- PLL part No.: PT626-1005-GPS
- Operating voltage, 5V or 12 V
- Frequency: 10.0MHz



# Test Circuit - Sinewave

