OCXO Model: OS400-2005-010

Issue 2; 6th May 2022

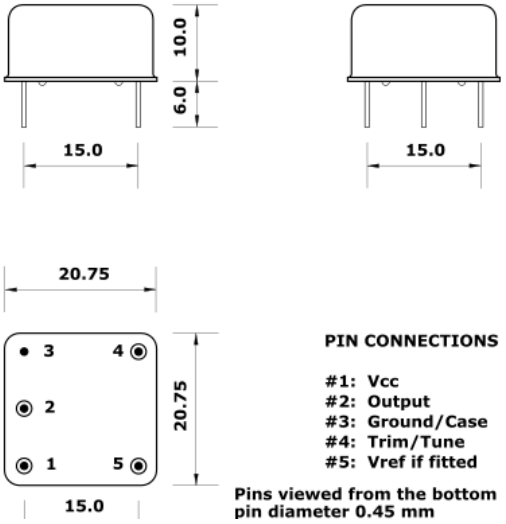
Features

- Temperature stability to ±5ppb
- Low phase noise
- Frequency 20MHz
- Industry standard package
- The flexible nature of the design means that variations to suit almost any application can be developed to meet individual customer requirements

Option A

- Temperature stability: ±5ppb over (0 to +50)°C
- Output: Sinewave +7dBm
- Voltage: 3.3V
- Warm up current: 570mA
- Quiescent current: 220mA

Dimensions (mm)



Phase Noise (typical)

- $F0_0$+10Hz -120 dBc/Hz
- $F0_0$+100Hz -145 dBc/Hz
- $F0_0$+1KHz -155 dBc/Hz
- $F0_0$+10KHz -165 dBc/Hz
- $F0_0$+100KHz -168 dBc/Hz

Voltage / Load change

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

Ageing

- Per day: ±0.15ppb max.
- Per year: ±60ppb max.
- Warm up time: 5 minutes to within 1 ppm

Voltage Trim

- ±0.5ppm minimum
- Trim impedance 50KΩ

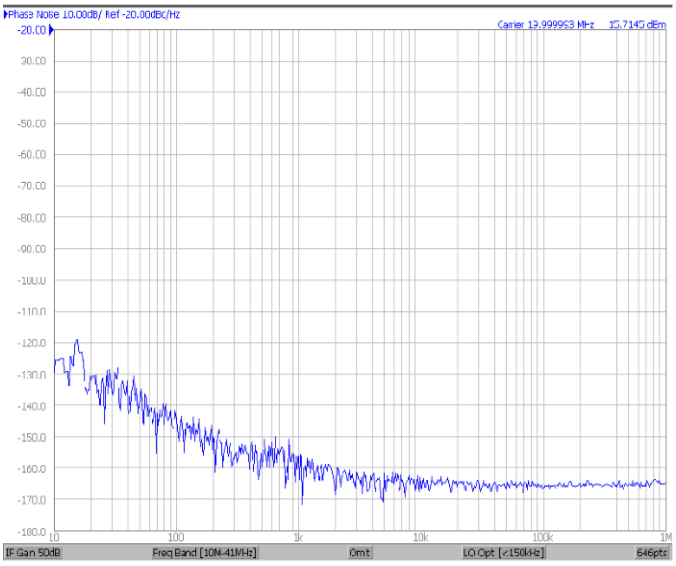
Reference Options

- 3.0V for 3.3V supply

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

Phase Noise Plot



- 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

- Unique customer part number and custom specification issued with each application
- OCXO Model: OS400-2005-010
- Frequency: 20MHz
- Stability/Output/Voltage: Option A
- Supply voltage code: V1 = +3.3Vd.c. supply
- Add suffix (R) for Vref output on pin #5

Test Circuit - Sinewave