

OCXO Part No.: OS400-1005-012

Issue 2; 11th May 2022

Features

- Temperature stability to ± 5 ppb
- Low phase noise
- Frequency 10.00MHz
- 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: ± 5 ppb over (0 to +50) $^{\circ}$ C
- Output: Sinewave 0dBm nominal
- Harmonics: -20dBc
- Voltage: 5.0V
- Warm Up Current: 470mA
- Quiescent current: 220mA

Phase Noise (typical)

- $F_{O_0}+10$ Hz -130 dBc/Hz
- $F_{O_0}+100$ Hz -150 dBc/Hz
- $F_{O_0}+1$ KHz -160 dBc/Hz
- $F_{O_0}+10$ KHz -168 dBc/Hz
- $F_{O_0}+100$ KHz -175 dBc/Hz

Values based on a 10MHz unit

Voltage / Load change

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

Ageing

Bases on 10MHz unit after 30 days continuous operation:

- Per day: ± 0.7 ppb max.
- Per year: ± 200 ppb max.
- Warm up time: 5 minutes to within 0.1ppm

Voltage Trim

- ± 0.5 ppm minimum
- Trim impedance 50K Ω

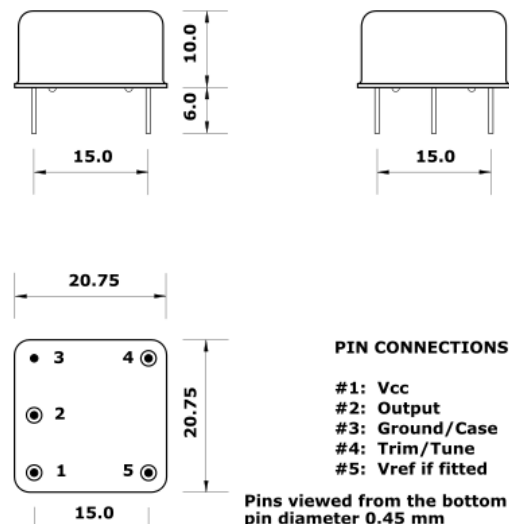
Reference Options

- 3.0V

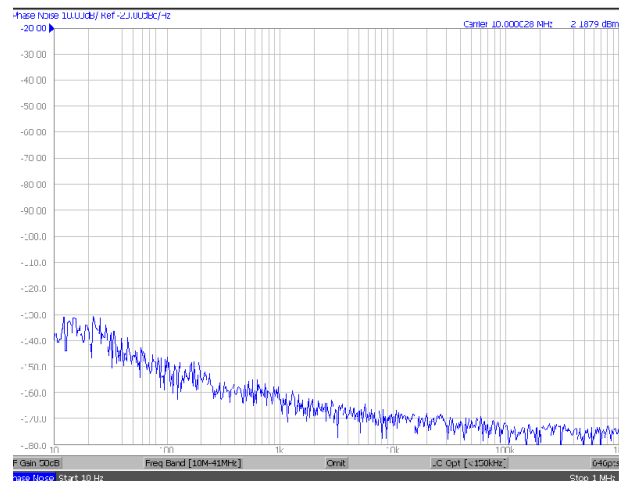
Environmental

- Electrostatic-Sensitive Device (ESD)
- Storage Temperature Range: (-40 to +125) $^{\circ}$ C

Dimensions (mm)



Phase Noise Plot



- 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
- 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

- OCXO Part No.: OS400-1005-012
- Frequency: 10.00MHz
- Stability/Output/Voltage: Option A

Test Circuit - Sinewave

