RFX Group
Incorporating Laptech Precision

OCXO Part No: OS560-2005-013

Issue 2; 6th May 2022

Features

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

Option C

- Temperature stability: ±20ppb over (–40 to +70)$^{\circ}$C
- Output: Sinewave 7dBm nominal
- Voltage: 3.3V
- Warm up current: 720mA
- Quiescent current: 320mA

Phase Noise (typical)

- $F0_0$+10Hz   -128 dBc/Hz
- $F0_0$+100Hz   -145 dBc/Hz
- $F0_0$+1KHz   -155 dBc/Hz
- $F0_0$+10KHz   -160 dBc/Hz
- $F0_0$+100KHz   -168 dBc/Hz

Values based on 10MHz unit

Voltage / Load change

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

Ageing

After 30 days continuous operation:

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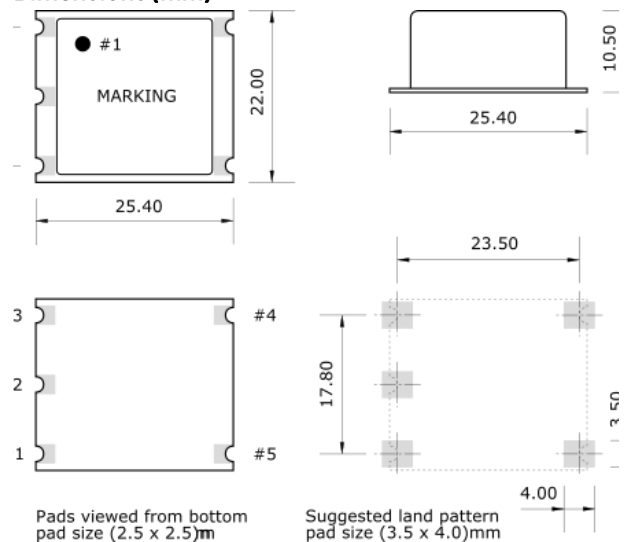
Voltage Trim

- ±0.5ppm minimum
- Trim impedance 50KΩ
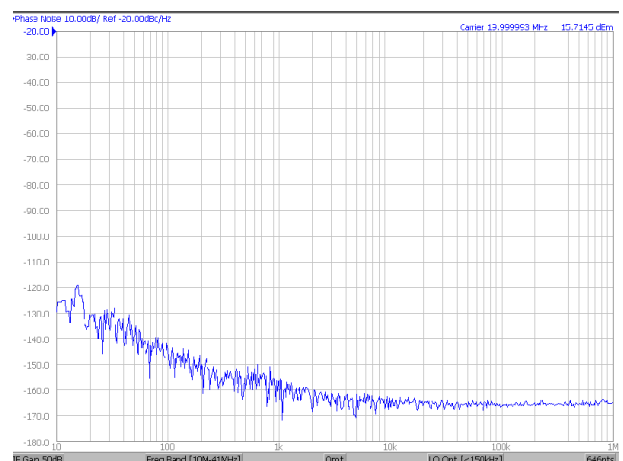
Reference Options:

- 3.0V

Environmental

- Electrostatic-Sensitive Device (ESD)
- Storage Temperature Range: (–40 to +125)$^{\circ}$C
- Mechanical shock: MIL standard 202F, method 213, condition J

Dimensions (mm)

Pads viewed from bottom
pad size (2.5 x 2.5)m

Suggested land pattern
pad size (3.5 x 4.0)mm

Phase Noise Plot

- 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

- Unique customer part number and custom specification issued with each application
- OCXO Part No: OS560-2005-013
- Frequency: 20MHz
- Stability/Output/Voltage: Option C
- Supply voltage code: V1= +3.3Vd.c. supply
- Add suffix (R) for Vref output on pin #5

Test Circuit - Sinewave

Test Circuit includes a 6 dB pad