RFX Group
Incorporating Laptech Precision

OCXO Model: OA265-1005-005

Issue 1; 7th May 2024

Features

- Temperature stability to ±50ppb
- Low phase noise options
- Frequency range 10.0MHz
- Low pre-aged options available
- 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

Specification

- Temperature stability: ±50ppb over (-20 to 60)°C
- Output: CMOS 15pF, 45% 55%
- Voltage: 3.3V
- Warm up Current: 560mA
- Quiescent current: 240mA

Phase Noise (typical)

- $F0_0$+10Hz -115 dBc/Hz
- $F0_0$+100Hz -140 dBc/Hz
- $F0_0$+1KHz -152 dBc/Hz
- $F0_0$+10KHz -160 dBc/Hz
- $F0_0$+100KHz -165 dBc/Hz

Voltage /Load change

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

Ageing

Based on 10MHz unit after 30 days continuous operation:

- Per day: ±2ppb max.
- Per year: ±500ppb max.
- Warm up time: 1 minute max. to within ±0.25ppm of nominal

Voltage Trim

- ±10ppm typical
- Trim impedance 50KΩ

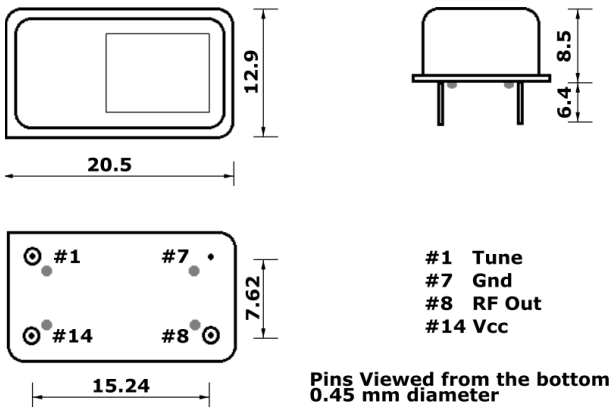
Reference Options

- N/A

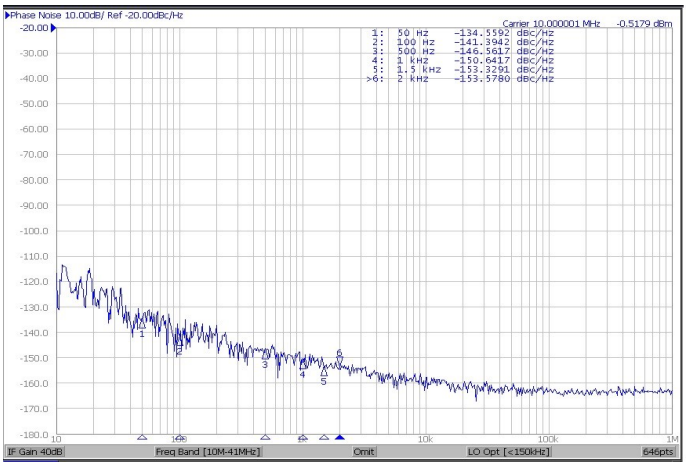
Environmental

- Electrostatic-Sensitive Device (ESD)
- Storage Temperature Range: (-55 to 125)°C
- Mechanical shock: MIL standard 202F, method 213, condition J

Dimensions (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

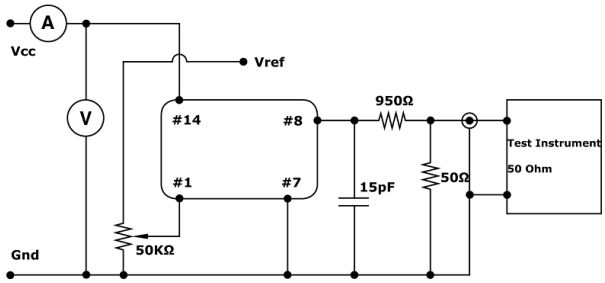
Compliance

- 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 number: OA265-1005-005
- Frequency: 10.0MHz

Test Circuit - CMOS Load