

## OCXO Model: OS400-1005-022

Issue 2; 17th May 2022

### Features

- Temperature stability to  $\pm 5$ ppb
- Low phase noise
- Frequency 10MHz
- 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:  $\pm 5$ ppb over ( 0 to  $+50$ ) $^{\circ}$ C
- Output: LVCMOS 15pF
- Duty cycle: 45% 55%
- Voltage: 5.0V
- Warm Up Current: 470mA
- Quiescent current: 220mA

### Phase Noise (typical)

- $F_{O_0}+10$ Hz -125 dBc/Hz
- $F_{O_0}+100$ Hz -145 dBc/Hz
- $F_{O_0}+1$ KHz -155 dBc/Hz
- $F_{O_0}+10$ KHz -165 dBc/Hz
- $F_{O_0}+100$ KHz -168 dBc/Hz

Values based on a 10MHz unit

### Voltage / Load change

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

### Ageing

Bases on 10MHz unit after 30 days continuous operation:

- Per day:  $\pm 0.7$ ppb max.
- Per year:  $\pm 200$ ppb max.
- Warm up time: 5 minutes to within 1 ppm

### Voltage Trim

- $\pm 0.5$ ppm minimum
- Trim impedance 50K $\Omega$

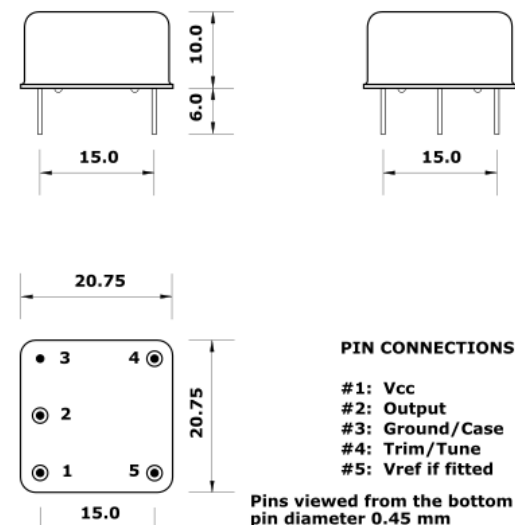
### Reference Options

- 3.0V

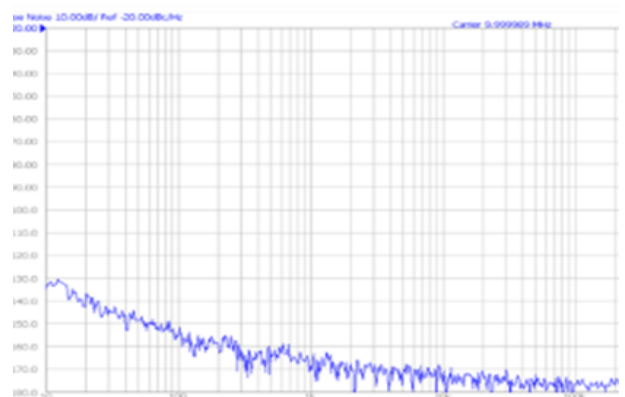
### Environmental

- 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

- Unique customer part number and custom specification issued with each application
- OCXO Model: OS400-1005-022
- Frequency: 10MHz
- Stability/Output/Voltage: Option A
- Supply voltage code: V2 = +5.0Vd.c. supply
- Add suffix (R) for Vref output on pin #5

#### Test Circuit - Sinewave

