

OCO-M25BS

High frequency OCXO Sine Wave



QuartzCom
the communications company



Features

- High frequency: up to 500 MHz
- Ultra Low Phase Noise option

| Parameter | Specification | | | | | |
|--|---|------------------|-------------------------------|-------------------------------------|-------------------------------|-------------|
| | OCO-M25BS5 | | | OCO-M25BS12 | | |
| Frequency Range | 48.000 ~ 500 MHz | | | | | |
| Standard Frequencies | 50MHz 100MHz 122.880MHz 400MHz | | | | | |
| <u>Operating Temperature Range</u> Code | EH | GH | JK | NK | NN | Z |
| °C | 0 / +60 | -10 / +60 | -20 / +70 | -40 / +70 | -40 / +85 | Custom |
| Frequency Stability Code | u50 | | u10 | | 75n | |
| vs <u>Operating Temperature Range</u> Note 2 | $\leq \pm 5.0 \times 10^{-7}$ | | $\leq \pm 1.0 \times 10^{-7}$ | | $\leq \pm 7.5 \times 10^{-8}$ | |
| vs. Supply Voltage change [Vdc] $\pm 10\%$ | $\leq \pm 5 \times 10^{-8}$ | | | | | |
| vs. Load change $\pm 5\%$ | $\leq \pm 2 \times 10^{-8}$ | | | | | |
| vs. Aging after 30days of operation 1 st year | $\leq \pm 2 \times 10^{-7}$ | | | Code 17 | $\leq \pm 1 \times 10^{-7}$ | |
| Output waveform | Sine wave | | | | | |
| Output level | > 400 mV RMS | | | | | |
| Output load | 50Ω $\pm 10\%$ | | | | | |
| Harmonics | < - 25 dBc | | | | | |
| Sub-harmonics | < - 45 dBc | | | | | |
| Supply Voltage [Vdc] | +5.0 V $\pm 5\%$ | | | +12.0 V $\pm 5\%$ | | |
| Steady-state current consumption @ +25 °C | < 250 mA | | | < 120 mA | | |
| Warm-up current consumption @ +25 °C | < 600 mA | | | < 300 mA | | |
| Warm-up time @ +25 °C | < 120s | | | $< \pm 2 \times 10^{-7}$ | | |
| Electronic Frequency Control [EFC] range | $> \pm 2 \times 10^{-6}$ | | | positive slope | | |
| Voltage Control [Vc] | 0 ~ +4.0 V | | | 0 ~ +10.0 V | | |
| Reference voltage output [Vref] | +4.0 V | | | +10.0 V | | |
| Phase Noise @ 100MHz dBc/Hz | Option | Vdc 5.0 V | | Vdc 12.0 V | | |
| | | - | LN | - | LN | ULN |
| | 10 Hz | ≤ -95 | ≤ -100 | ≤ -95 | ≤ -100 | ≤ -102 |
| | 100 Hz | ≤ -127 | ≤ -135 | ≤ -127 | ≤ -135 | ≤ -137 |
| | 1 kHz | ≤ -156 | ≤ -164 | ≤ -156 | ≤ -160 | ≤ -164 |
| | 10 kHz | ≤ -172 | ≤ -174 | ≤ -172 | ≤ -174 | ≤ -176 |
| | 100 kHz | ≤ -174 | ≤ -175 | ≤ -176 | ≤ -177 | ≤ -178 |
| Storage temperature range | -55 ~ +80 °C | | | | | |
| Environmental test | | | | | | |
| Vibration | acceleration: 5 g; 10 Hz up to 500 Hz and down to 10 Hz; all 3 axes | | | | | |
| Shock | 75 g, half-sine, 3 ms | | | | | |

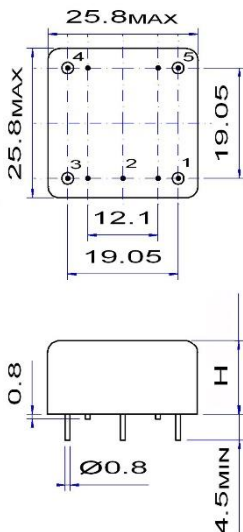
Note 1: unless otherwise specified conditions are @ 25°C still air

Note 2: all combination not possible (consult factory)

Pin function

- 1 # RF output
- 2 # GND
- 3 # Vc
- 4 # Vref
- 5 # Vdc

For standard type:
H = 10.5 mm



Ordering Guide:

OCO-M25BS5-NKu10-17-LN-100MHz

Vdc OTR Aging Phase Noise

Connection circuit

