

OCO-M36BS

High Frequency OCXO Sine Wave



QuartzCom
the communications company



Features

- High frequency: up to 160 MHz
- Ultra Low Phase Noise option

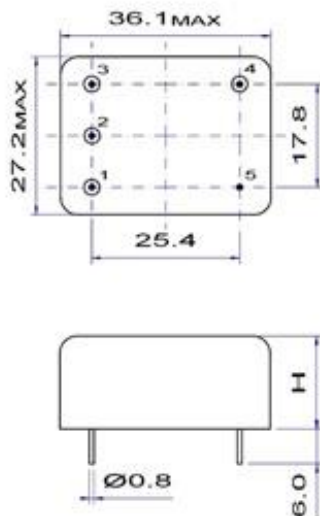
| Parameter | Specification | | | | | |
|---|---|------------------|-------------------------------|-------------------------------------|-------------------------------|-------------|
| | OCO-M36BS5 | | | OCO-M36BS12 | | |
| Frequency Range | 48.000 ~ 160 MHz | | | | | |
| Standard Frequencies | 48.000 MHz | | | 100.000MHz | | |
| <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 | $\leq \pm 5.0 \times 10^{-7}$ | | $\leq \pm 1.0 \times 10^{-7}$ | | $\leq \pm 5.0 \times 10^{-8}$ | |
| vs. Supply Voltage change [Vdc] $\pm 5\%$ | $\leq \pm 2 \times 10^{-8}$ | | | | | |
| vs. Load change $\pm 5\%$ | $\leq \pm 2 \times 10^{-8}$ | | | | | |
| vs. Aging after 30 days of operation | $\leq \pm 1 \times 10^{-7}$ | | | 1 st year | | |
| Output waveform | Sine wave | | | | | |
| Output level | > 400 mV RMS | | | | | |
| Output load | 50Ω $\pm 10\%$ | | | | | |
| Harmonics | < -30 dBc | | | | | |
| Sub-harmonics | < -70 dBc | | | | | |
| Supply Voltage [Vdc] | +5.0 V $\pm 5\%$ | | | +12.0 V $\pm 5\%$ | | |
| Steady-state current consumption @ +25 °C | < 300 mA | | | < 150 mA | | |
| Warm-up current consumption @ +25 °C | < 600 mA | | | < 300 mA | | |
| Warm-up time @ +25 °C | < 180s | | | $< \pm 5 \times 10^{-7}$ | | |
| Electronic Frequency Control [EFC] range | $> \pm 2 \times 10^{-6}$ | | | positive slope | | |
| Voltage Control [Vc] | 0 ~ +4.5 V | | | 0 ~ +10.0 V | | |
| Reference voltage output [Vref] | +4.5 V | | | +10.0 V | | |
| Phase Noise @ 100MHz dBc/Hz | Option | Vdc 5.0 V | | Vdc 12.0 V | | |
| | | - | LN | - | LN | ULN |
| | 10 Hz | ≤ -90 | ≤ -100 | ≤ -90 | ≤ -95 | ≤ -102 |
| | 100 Hz | ≤ -120 | ≤ -130 | ≤ -120 | ≤ -125 | ≤ -135 |
| | 1 kHz | ≤ -150 | ≤ -155 | ≤ -155 | ≤ -157 | ≤ -162 |
| | 10 kHz | ≤ -160 | ≤ -168 | ≤ -170 | ≤ -172 | ≤ -175 |
| | 100 kHz | ≤ -165 | ≤ -170 | ≤ -170 | ≤ -175 | ≤ -180 |
| Storage temperature range | -55 ~ +85 °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 # Vc
- 2 # Vref
- 3 # Vdc
- 4 # RF output
- 5 # GND



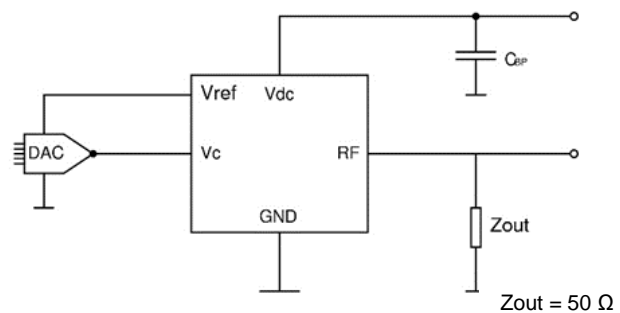
H = 16 mm

Ordering Guide:

OCO-M36BS12-JKu10-ULN-100MHz

Vdc OTR Phase Noise

Connection circuit



Zout = 50 Ω