

OCO-M50ADS

DOCXO Sine Wave



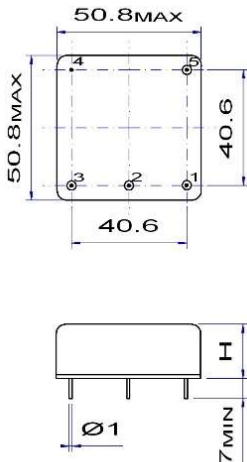
Features

- Master clock reference
- High Frequency stability versus 20°C change: $\leq \pm 1 \times 10^{-11}$
- Low Aging Option: $\leq \pm 1 \times 10^{-8}$ /year $\leq \pm 5 \times 10^{-11}$ /day

| Parameter | Specification | | | | | | |
|---|---|------------------------------|-----------|------------------------------|-----------|------------------------------|--------|
| | OCO-M50ADS5 | | | OCO-M50ADS12 | | | |
| Frequency Range | 10.000 MHz | | | | | | |
| Standard Frequencies | 10.000 MHz | | | | | | |
| Operating Temperature Range | Code | EH | GH | JK | NK | NN | Z |
| | °C | 0 / +60 | -10 / +60 | -20 / +70 | -40 / +70 | -40 / +85 | Custom |
| Frequency Stability | Code | 80p | | 50p | | 10p | |
| vs. Operating Temperature Range | *Note 2 | $\leq \pm 8 \times 10^{-11}$ | | $\leq \pm 5 \times 10^{-11}$ | | $\leq \pm 1 \times 10^{-11}$ | |
| vs. Supply Voltage change [Vdc] $\pm 5\%$ | | | | $\leq \pm 1 \times 10^{-11}$ | | | |
| vs. Load change $\pm 5\%$ | | | | $\leq \pm 1 \times 10^{-11}$ | | | |
| vs. Aging after 30 days of operation | *Note 2 | | | $\leq \pm 2 \times 10^{-8}$ | | 1 st year | |
| Short term Stability for Fo | *Note 2 | | | $\leq 2 \times 10^{-12}$ | | @ 1s | |
| Output waveform | Sine wave | | | | | | |
| Output Level | > 300 mV RMS | | | | | | |
| Output Load | 50Ω $\pm 5\%$ | | | | | | |
| Harmonics | < -30 dBc | | | | | | |
| Supply Voltage [Vdc] | +5.0 V $\pm 5\%$ | | | +12.0 V $\pm 5\%$ | | | |
| Steady-state current consumption @ +25 °C | < 0.8 A | | | < 0.3 A | | | |
| Warm-up current consumption @ +25 °C | < 2.0 A | | | < 1.0 A | | | |
| Warm-up time @ +25 °C | < 15 min. | | | < $\pm 5 \times 10^{-8}$ | | | |
| Electronic Frequency Control [EFC] range | NA | | | | | | |
| Phase Noise @ 10MHz [dBc/Hz] | | +5.0 V | | +12.0 V | | | |
| | 1 Hz | ≤ -100 | | ≤ -100 | | | |
| | 10 Hz | ≤ -130 | | ≤ -130 | | | |
| | 100 Hz | ≤ -150 | | ≤ -150 | | | |
| | 1 kHz | ≤ -155 | | ≤ -155 | | | |
| | 10 kHz | ≤ -155 | | ≤ -160 | | | |
| 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 # NC
- 2 # NC
- 3 # RF out
- 4 # GND
- 5 # Vdc

H = < 19 mm

Ordering Guide:

OCO-M50ADS12-JK50p-10MHz

Vdc OTR

Connection circuit

