

OCO-M25BS

High frequency through hole OCXO
Sine wave



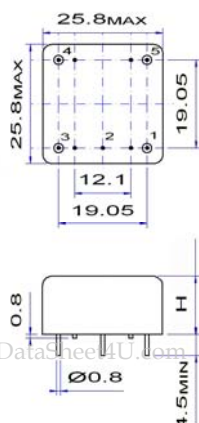
Features

- Applications: instrumentation, communications, infrastructure
- High frequency: up to 500 MHz
- Short warm-up time: < 60 s
- Low phase noise floor of < -167 dBc/Hz

| Parameter | Specification | |
|--|-------------------------------|----------------------------------|
| Frequency range | 48.00 ~ 500.00 MHz | |
| Standard frequency | 100.000 MHz | |
| Frequency stability | $\leq \pm 1 \times 10^{-7}$ | over -40 ~ +70 °C |
| vs. operating temperature range | $\leq \pm 7.5 \times 10^{-8}$ | over -20 ~ +70 °C |
| vs. supply voltage change | $\leq \pm 2 \times 10^{-8}$ | ±10 % |
| vs. load change | $\leq \pm 1 \times 10^{-8}$ | ±10 % |
| vs. aging after 30 days of operation | $\leq \pm 3 \times 10^{-7}$ | 1 st year |
| Output waveform | sine wave | > 400 mV (rms) |
| Output load | 50 Ω | ±10 % |
| Supply voltage | +12 V | ±5 % |
| Peak current consumption during warm-up time | < 300 mA | @ +25 °C |
| Steady-state current consumption | < 100 mA | @ +25 °C |
| Warm-up time | < 60 s | < ±2 x 10 ⁻⁷ @ +25 °C |
| Frequency pulling range | > ±3 ppm | positive slope |
| Vcontrol (Vc) via external voltage | 0 ~ +10 V | |
| Vcontrol (Vc) via external potentiometer | 20 kΩ | |
| Reference voltage output (Vref) | +10 V | |
| Phase noise @ 100 MHz carrier frequency | -95 dBc/Hz | @ 10 Hz |
| | -125 dBc/Hz | @ 100 Hz |
| | -150 dBc/Hz | @ 1 kHz |
| | -165 dBc/Hz | @ 10 kHz |
| Harmonics | < -25 dBc | |
| Operating temperature range | -20 ~ +70 °C or -40 ~ +70 °C | |
| Storage temperature range | -55 ~ +85 °C | |
| Optional available with SMA connectors | | |

Environmental test

| | | |
|-----------|--|--|
| vibration | acceleration: 10 g; 10 Hz up to 500 Hz and down to 10 Hz; all 3 axes, 4.5 h/axis | |
| shock | 100 g, half-sine, 3 ms (3 shocks each, 6 directions) | |

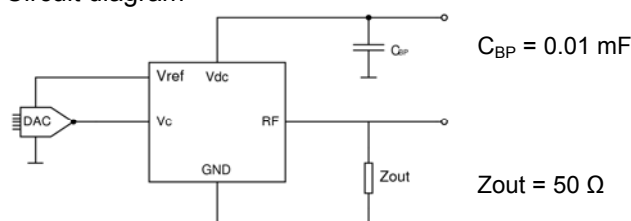


Pin function

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



Circuit diagram



For standard type:
H = 10.0 mm

For SMA connector type:
H = 12.7 mm

2002/95/EC RoHS compliant

12 May. 10