

OCO-M25BS

High frequency through hole OCXO
Sine wave

QuartzCom
the communications company



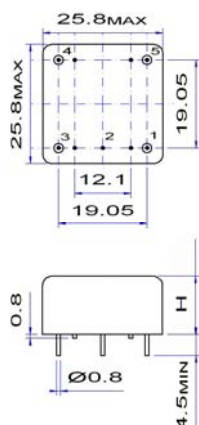
Features

- 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)	

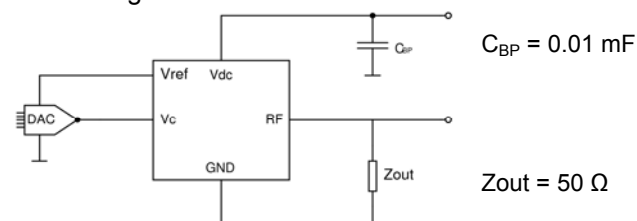


Pin function

- # 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