

OCO-M36BS

Through hole OCXO
Sine wave

QuartzCom
the communications company



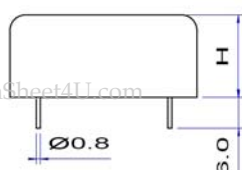
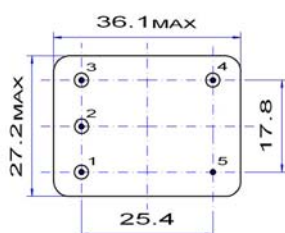
Features

- Applications: PLL, VSAT, frequency synthesizers
- High frequency: up to 120 MHz
- Short warm-up time: < 2 min.
- Low phase noise – floor of < -165 dBc/Hz

Parameter	Specification	
	OCO-M36BS5	OCO-M36BS12
Frequency range	48.0000 ~ 120.0000 MHz	
Standard frequencies	48.00, 56.00, 60.00, 80.00 & 100.00 MHz	
Frequency stability vs. operating temperature range	$\leq \pm 1.0 \times 10^{-7}$	over -40 ~ +70 °C
	$\leq \pm 7.5 \times 10^{-8}$	over -20 ~ +70 °C
	$\leq \pm 5.0 \times 10^{-8}$	over -10 ~ +60 °C
vs. supply voltage change	$\leq \pm 1 \times 10^{-7}$	±5 %
vs. load change	$\leq \pm 5 \times 10^{-8}$	±5 %
vs. aging after 30 days of operation	$\leq \pm 3 \times 10^{-7}$	1 st year
Output waveform	Sine wave > 300 mV (rms)	Sine wave > 400 mV (rms)
Output Load	50 Ω	±5 %
Supply voltage	+5.0 V ±5 %	+12 V ±5 %
Steady-state current consumption @ +25 °C	< 300 mA	< 150 mA
Warm-up time	< 2 min	< ±1 × 10 ⁻⁷ @ +25 °C
Frequency pulling range	> ±3 × 10 ⁻⁶	positive slope
Vcontrol (Vc) via external voltage	0 ~ +4 V	0 ~ +8 V
Reference voltage output (Vref)	+4.0 V	+8.0 V
Phase noise @ 100 MHz carrier frequency & for Vdc = 12 V	< -98 dBc/Hz	@ 10 Hz
	< -128 dBc/Hz	@ 100 Hz
	< -150 dBc/Hz	@ 1 kHz
	< -165 dBc/Hz	@ 10 kHz
Harmonics	< -30 dBc	
Operating temperature range	-10 ~ +60 °C, -20 ~ +70 °C, or -40 ~ +70 °C	
Storage temperature range	-55 ~ +85 °C	
Case height	16.0 mm	

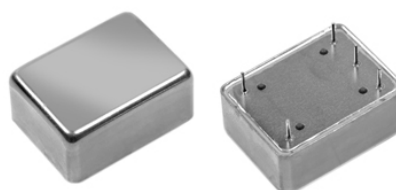
Environmental test

vibration	acceleration: 5 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)

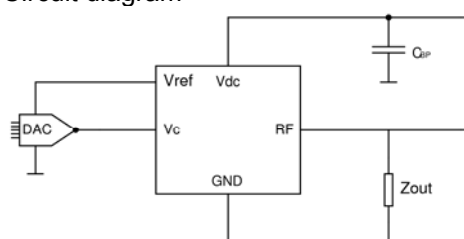


Pin function

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



Circuit diagram



$C_{BP} = 0.01 \text{ mF}$

$Z_{out} = 50 \Omega$

2002/95/EC RoHS compliant

12 May, 10

QuartzCom AG
sales@quartzcom.com
www.quartzcom.com

QuartzCom Asia
sales-asia@quartzcom.com

QuartzCom USA
sales-usa@quartzcom.com

ISO 9001
BUREAU VERITAS
Certified
www.DataSheet4U.com