OCO-M36A

OCXO HCMOS / Sine Wave

QuartzCom
the communications company

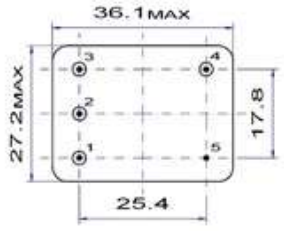
Features

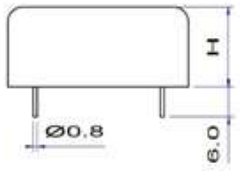
- Frequency: 8.192MHz to 40 MHz
- Supply Voltage option: 3.3V 5.0V 12.0V

Parameter	Specification					
	OCO-M36A_3		OCO-M36A_5		OCO-M36A_12	
Frequency Range	8.192 ~ 40.000 MHz					
Standard Frequencies	10MHz 12.8MHz 13MHz 16.384MHz 20MHz					
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	**5n0**		**2n0**		**n50**	
vs Operating Temperature Range *Note 2	≤ ± 5 x 10^{-9}		≤ ± 2 x 10^{-9}		≤ ± 5 x 10^{-10}	
vs. Supply Voltage change [Vdc] ±5 %	≤ ± 5 x 10^{-10}					
vs. Load change ±5 %	≤ ± 5 x 10^{-10}					
vs. Aging after 30 days of operation *Note 2	≤ ± 3 x 10^{-8} 1st year					
Short term Stability for Fo 10MHz *Note 2	≤ 5 x 10^{-12} @ 1s					
Output waveform	**Sine wave [S]**			**HCMOS [H]**		
Output Level	> 500 mV RMS			V_{OL} < 0.5 V V_{OH} >4.0V		
Output Load	50Ω ±5 %			10kΩ / 30pF		
Harmonics	< - 30 dBc			NA		
Supply Voltage [Vdc]	**+3.3 V ±5 %**		**+5.0 V ±5 %**		**+12.0 V ±5 %**	
Steady-state current consumption @ +25 °C	< 650 mA		< 400 mA		< 150 mA	
Warm-up current consumption @ +25 °C	< 1500 mA		< 950 mA		< 400 mA	
Warm-up time @ +25 °C	< 180s < ±2 x 10^{-8}					
Electronic Frequency Control [EFC] range	> ±4 x 10^{-7} positive slope					
Voltage Control [Vc]	0 ~ +3.0 V		0 ~ +4.5 V		0 ~ +5.0 V	
Reference voltage output [Vref]	+3.0 V		+4.5 V		+5.0 V	
Phase Noise @ 20MHz [dBc/Hz]		**SINE**				**HCMOS**
	Option	**-**	**LN [Vdc 5 & 12V]**			
	10 Hz	≤ -120	≤ -125			≤ -120
	100 Hz	≤ -135	≤ -140			≤ -140
	1 kHz	≤ -140	≤ -150			≤ -145
	10 kHz	≤ -150	≤ -153			≤ -150
	100 kHz	≤ -150	≤ -153			≤ -150
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

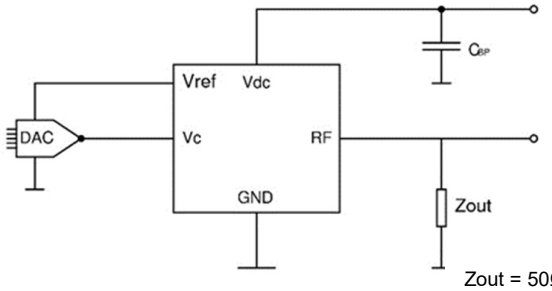
H = 12.7 mm

Ordering Guide:

OCO-M36AS5-JK2n0-LN-20MHz

Vdc OTR Phase Noise

Connection circuit



Zout = 50Ω
10 kΩ / 30pF

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