

OCO-M36A

OCXO HCMOS / Sine Wave



QuartzCom
the communications company



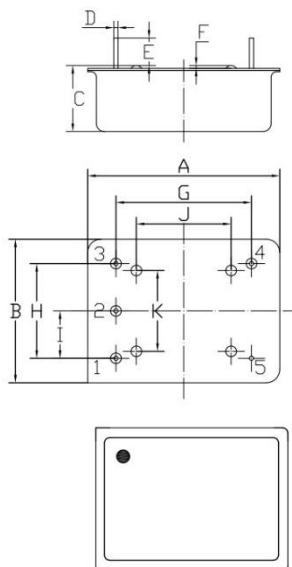
Features

- 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					
<u>Operating Temperature Range</u> 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 <u>Operating Temperature Range</u> *Note 2	$\leq \pm 5 \times 10^{-9}$		$\leq \pm 2 \times 10^{-9}$		$\leq \pm 5 \times 10^{-10}$	
vs. Supply Voltage change [Vdc] $\pm 5\%$	$\leq \pm 5 \times 10^{-10}$					
vs. Load change $\pm 5\%$	$\leq \pm 5 \times 10^{-10}$					
vs. Aging after 30 days of operation *Note 2			$\leq \pm 3 \times 10^{-8}$		1 st year	
Short term Stability for Fo 10MHz *Note 2			$\leq 5 \times 10^{-12}$		@ 1s	
Output waveform	Sine wave [S]			HCMOS [H]		
Output Level	> 500 mV RMS			VOL < 0.5 V VOH > 4.0V		
Output Load	50Ω $\pm 5\%$			10kΩ / 30pF		
Harmonics	< - 30 dBc			NA		
Supply Voltage [Vdc]	+3.3 V $\pm 5\%$		+5.0 V $\pm 5\%$		+12.0 V $\pm 5\%$	
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		< $\pm 2 \times 10^{-8}$			
Electronic Frequency Control [EFC] range	> $\pm 4 \times 10^{-7}$ positive slope					
Voltage Control [Vc]	0 ~ +3.0 V		0 ~ +4.0 V		0 ~ +5.0 V	
Reference voltage output [Vref]	+3.0 V		+4.0 V		+5.0 V	
Phase Noise @ 10MHz [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)



Symbol	Dimension (mm)	
	Min	Max
A		36.4
B		27.4
C		13.0
D	0.73	0.87
E	4.5	5.9
F	0.4	0.7
G	25.2	25.6
H	17.6	18.0
I	8.80	9.00

Pin No.	Pin Function
1	VC
2	Vref
3	VS
4	Output
5	GND

Ordering Guide:

OCO-M36A55-JK2n0-LN-20MHz

Vdc OTR Phase Noise

Connection circuit

