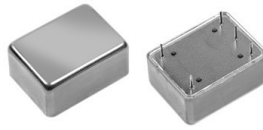


# OCO-M36AGS

Low G-sensitivity OCXO  
Sine wave



**QuartzCom**  
the communications company



## Features

- Ultra Low G-sensitivity option
- Low Phase Noise

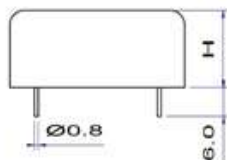
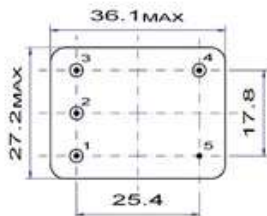
Parameter	Specification					
	OCO-M36AGS5			OCO-M36AGS12		
Frequency Range	5.000 ~ 20.000 MHz					
Standard Frequencies	5.000 10.000 12.800 16.384 20.000MHz					
<u>Operating Temperature Range</u> <b>Code</b>	<b>EH</b>	<b>GH</b>	<b>JK</b>	<b>NK</b>	<b>NN</b>	<b>Z</b>
°C	0 / +60	-10 / +60	-20 / +70	-40 / +70	-40 / +85	Custom
<b>Frequency Stability</b> <b>Code</b>	<b>5n0</b>		<b>2n0</b>		<b>1n0</b>	
vs <u>Operating Temperature Range</u> Note 2	$\leq \pm 5 \times 10^{-9}$		$\leq \pm 2 \times 10^{-9}$		$\leq \pm 1 \times 10^{-9}$	
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	$\leq \pm 3 \times 10^{-8}$ 1 <sup>st</sup> year					
<b>G-sensitivity</b> <b>Code</b>	<b>G1</b>		<b>G2</b>		<b>G3</b>	
[ In the range 0 ~ 500Hz    Worst axis ]	$\leq 1.5 \times 10^{-9}/g$		$\leq 1.0 \times 10^{-9}/g$		$\leq 0.5 \times 10^{-9}/g$	
Output waveform	Sine wave					
Output level	> 300 mV RMS					
Output load	50Ω $\pm 5 \%$					
Harmonics	< -30 dBc					
Sub-harmonics	< -70 dBc					
<b>Supply Voltage [ Vdc ]</b>	<b>+5.0 V <math>\pm 5 \%</math></b>			<b>+12.0 V <math>\pm 5 \%</math></b>		
Steady-state current consumption @ +25 °C	< 400 mA			< 150 mA		
Warm-up current consumption @ +25 °C	< 1000 mA			< 400 mA		
Warm-up time @ +25 °C	< 300s			< $\pm 2 \times 10^{-8}$		
<b>Electronic Frequency Control [ EFC ] range</b>	> $\pm 4 \times 10^{-7}$			positive slope		
Voltage Control [ Vc ]	0 ~ +4.5 V			0 ~ +5.0 V		
Reference voltage output [ Vref ]	+4.5 V			+5.0 V		
<b>Phase Noise @ 10MHz</b> <b>dBc/Hz</b>					<b>LN [12V]</b>	
	<b>10 Hz</b>	< -95		< -100		
	<b>100 Hz</b>	< -125		< -130		
	<b>1 kHz</b>	< -145		< -153		
	<b>10 kHz</b>	< -150		< -158		
	<b>100 kHz</b>	< -155		< -160		
Storage temperature range	-55 ~ +85 °C					
Vibration	acceleration: 10 g; 10 Hz up to 200 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 # RF output
- 2 # GND
- 3 # Vc
- 4 # Vref
- 5 # Vdc



H = 13.0 mm

## Ordering Guide:

**OCO-M36AGS12-JK2n0-LN-G2 10MHz**

Vdc    OTR    Phase Noise    G-sens.

Connection circuit

