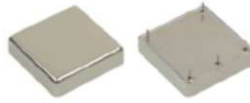


# OCO-M50AGS

OCXO Sine Wave



QuartzCom  
the communications company



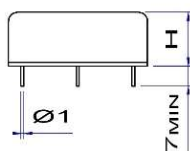
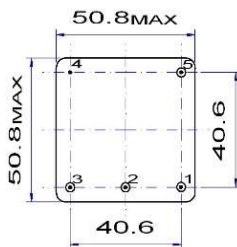
## Features

- Phase Noise Option :
- Short term stability option:  $\leq 1.5 \times 10^{-13}$  @ 1s

Parameter	Specification					
	OCO-M50AGS12					
Frequency Range	10.000 MHz					
<u>Operating Temperature Range</u> Code	<b>EH</b>	<b>GH</b>	<b>JK</b>	<b>NK</b>	<b>NM</b>	<b>Z</b>
°C	0 / +60	-10 / +60	-20 / +70	-40 / +70	-40 / +80	Custom
<b>Frequency Stability</b> Code	<b>5n0</b>		<b>2n0</b>		<b>1n0</b>	
vs <u>Operating Temperature Range</u> *Note 2	$\leq \pm 5 \times 10^{-9}$		$\leq \pm 3 \times 10^{-9}$		$\leq \pm 1 \times 10^{-9}$	
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 *Note 2	$\leq \pm 2 \times 10^{-8}$ 1 <sup>st</sup> year					
<b>Short term Stability @ 1s [Allan Variance]</b> Code	<b>p50</b>		<b>p30</b>		<b>p15</b>	
*Note 2	$\leq 5 \times 10^{-13}$		$\leq 3 \times 10^{-13}$		$\leq 1.5 \times 10^{-13}$	
Output waveform	<b>Sine wave</b>					
Output Level	> 400 mV RMS					
Output Load	50Ω $\pm 5\%$					
Harmonics	< -30 dBc					
<b>Supply Voltage [ Vdc ]</b>	<b>+12.0 V <math>\pm 5\%</math></b>					
Steady-state current consumption @ +25 °C	< 250 mA					
Warm-up current consumption @ +25 °C	< 600 mA					
Warm-up time @ +25 °C	< 300s		< $\pm 2 \times 10^{-8}$			
<b>Electronic Frequency Control [ EFC ] range</b>	> $\pm 3 \times 10^{-7}$ positive slope					
Voltage Control [ Vc ]	0 ~ +5.0 V					
Reference voltage output [ Vref ]	+5.0 V					
<b>Phase Noise @ 10MHz [dBc/Hz]</b>	<b>Option</b>	<b>LN</b>		<b>ULN</b>		
	<b>0.1 Hz</b>	$\leq -80$	$\leq -85$	$\leq -89$		
	<b>1 Hz</b>	$\leq -113$	$\leq -116$	$\leq -119$		
	<b>10 Hz</b>	$\leq -143$	$\leq -144$	$\leq -145$		
	<b>100 Hz</b>	$\leq -154$	$\leq -157$	$\leq -157$		
	<b>1 kHz</b>	$\leq -160$	$\leq -160$	$\leq -160$		
	<b>10 kHz</b>	$\leq -163$	$\leq -165$	$\leq -167$		
Storage temperature range	-55 ~ +85 °C					
<b>Environmental test</b>						
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# RF out
- 4# GND
- 5# Vdc

H = < 16 mm

## Ordering Guide:

**OCO-M50AGS12-JK2n0-p30-ULN-10MHz**

Vdc OTR AV Phase Noise

### Connection circuit

