

# OCO-M36ADS

OCXO Sine Wave



QuartzCom  
the communications company



## Features

- High Frequency stability vs Trange: up to  $\leq \pm 1 \times 10^{-10}$
- Low Phase Noise option

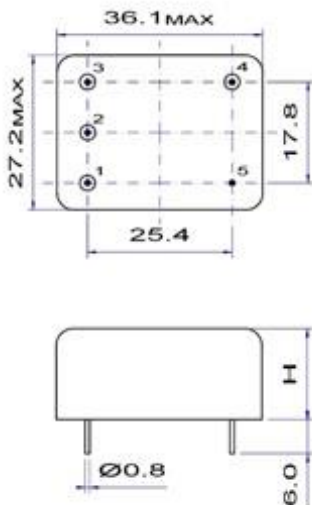
Parameter	Specification					
	OCO-M36ADS12					
Frequency Range	5.000 ~ 10.000 MHz					
Standard Frequencies	5.000MHz 8.192MHz 10.000MHz					
<u>Operating Temperature Range</u> <u>Code</u>	<b>EH</b>	<b>GH</b>	<b>JK</b>	<b>NK</b>	<b>NN</b>	<b>Z</b>
°C	0 / +60	-10 / +60	-20 / +70	-40 / +70	-40 / +85	Custom
<b>Frequency Stability</b> <u>Code</u>	<b>n50</b>		<b>n30</b>		<b>n10</b>	
vs <u>Operating Temperature Range</u> *Note 2	$\leq \pm 5 \times 10^{-10}$		$\leq \pm 3 \times 10^{-10}$		$\leq \pm 1 \times 10^{-10}$	
vs. Supply Voltage change [ Vdc ] $\pm 5\%$	$\leq \pm 1 \times 10^{-10}$					
vs. Load change $\pm 5\%$	$\leq \pm 1 \times 10^{-10}$					
vs. Aging after 30 days of operation	$\leq \pm 2 \times 10^{-8}$ 1 <sup>st</sup> year					
Short term Stability for Fo 10MHz        *Note 2	$\leq 5 \times 10^{-12}$ @ 1s					
Output waveform	<b>Sine wave [ S ]</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	< 160 mA					
Warm-up current consumption @ +25 °C	< 700 mA					
Warm-up time @ +25 °C	< 10 min    < $\pm 5 \times 10^{-8}$					
<b>Electronic Frequency Control [ EFC ] range</b>	> $\pm 4 \times 10^{-7}$ positive slope					
Voltage Control [ Vc ]	0 ~ +5.0 V					
Reference voltage output [ Vref ]	+5.0 V					
<b>Phase Noise @ 10MHz [ dBc/Hz ]</b>		<b>SINE</b>				
	<b>Option</b>	<b>-</b>		<b>LN</b>		
	<b>10 Hz</b>	$\leq -125$		$\leq -130$		
	<b>100 Hz</b>	$\leq -143$		$\leq -148$		
	<b>1 kHz</b>	$\leq -152$		$\leq -155$		
	<b>10 kHz</b>	$\leq -158$		$\leq -160$		
<b>100 kHz</b>	$\leq -158$		$\leq -160$			
Storage temperature range	-55 ~ +80 °C					
<b>Environmental test</b>						
Vibration	acceleration: 10 g; 10 Hz up to 500 Hz and down to 10 Hz; all 3 axes					
Shock	150 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



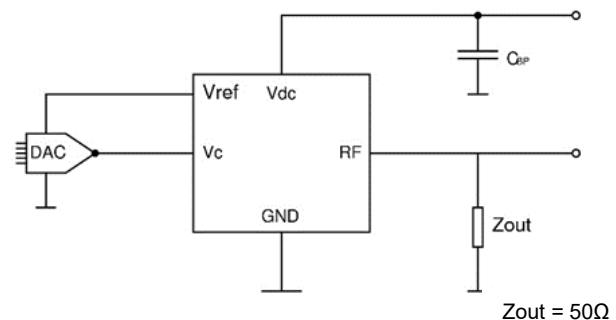
H = 19.0 mm

### Ordering Guide:

**OCO-M36ADS12-JKn30-LN-10MHz**

Vdc    OTR    Phase Noise

Connection circuit



Zout = 50Ω