

OCO-M14H

OCXO HCMOS



QuartzCom
the communications company



Features

- Low power consumption (0.4W)
- Wide Operating Temperature Range: $\leq \pm 10 \times 10^{-8}$ -40 to +85 °C

Parameter	Specification						
	OCO-M14H3			OCO-M14H5			
Frequency Range	10 MHz to 120 MHz						
Standard Frequencies	10.000, 20.000, 32.768, 40.000, 100.000 MHz						
Operating Temperature Range	Code	EH	GH	JK	NK	NN	Z
	°C	0 / +60	-10 / +60	-20 / +70	-40 / +70	-40 / +85	Custom
Frequency Stability							
vs Operating Temperature Range	Code	u10		50n		30n	
	Note 2	$\leq \pm 10 \times 10^{-8}$		$\leq \pm 50 \times 10^{-9}$		$\leq \pm 30 \times 10^{-9}$	
vs. Supply Voltage change (Vdc $\pm 4\%$)	$\leq \pm 0.1 \times 10^{-6}$						
vs. Load change ($\pm 10\%$)	$\leq \pm 3 \times 10^{-8}$						
vs. Aging after 30 days of operation 1 st year	$\leq 40\text{MHz}$	$\leq \pm 3 \times 10^{-7}$		$> 40\text{MHz}$	$\leq \pm 1 \times 10^{-6}$		
vs. Aging after 30 days of operation 10 years	$\leq 40\text{MHz}$	$\leq \pm 2.5 \times 10^{-6}$		$> 40\text{MHz}$	$\leq \pm 4 \times 10^{-6}$		
Short term stability (Allan variance @1s)	$< 1 \times 10^{-10}$ (Typ. : 5×10^{-11})						
Output waveform	HCMOS						
Output level	V _{OL} < 0.4 V			V _{OH} > 2.4 V			
Output load	15 pF						
Rise / Fall time	< 7 ns						
Supply Voltage [Vdc]	+3.3 V $\pm 4\%$			+5.0 V $\pm 4\%$			
Warm-up current @ +25 °C still air	< 350 mA (during 30s max.)			< 300 mA (during 10s max.)			
Steady-state current @ +25 °C still air	< 120 mA			< 80 mA			
Warm-up time	< 2 min			$< \pm 0.1 \times 10^{-6}$ @ +25 °C			
Electronic Frequency Control [EFC] range	$\leq 40\text{MHz}$	$\leq \pm 2.5 \times 10^{-6}$		$> 40\text{MHz}$	$\leq \pm 4 \times 10^{-6}$		
Voltage Control (Vc)	0 ~ +3.3 V			0.5 ~ +5.0 V			
Phase Noise [typical value] dBc/Hz			10 MHz			100 MHz	
	10 Hz			-105			-90
	100 Hz			-135			-120
	1 kHz			-150			-140
	10 kHz			-158			-150
	100 kHz			-160			-155
Storage temperature range	-55 ~ +85 °C						

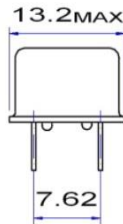
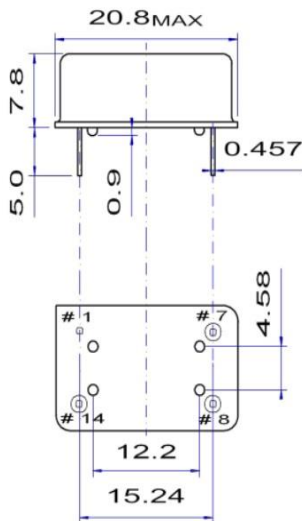
Note 1: unless otherwise specified conditions are @ 25°C still air

Note 2: all combination not possible (consult factory)

Ordering Guide:

OCO-M14H5-JK50n-40MHz

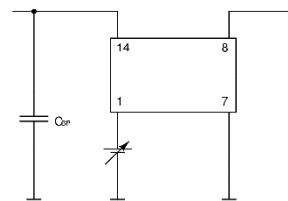
Vdc OTR



Pin function

- # 1 Vc
- # 7 GND
- # 8 RF output
- # 14 Vdc

External voltage



External potentiometer

