

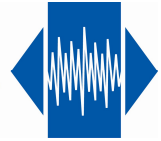
OCO-M14H

OCXO HCMOS

NEW



QuartzCom
the communications company



Features

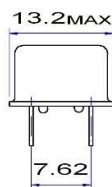
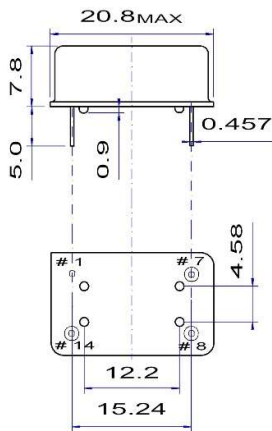
- Low power consumption (0.4W)
- Wide Operating Temperature Range: $\leq \pm 10 \times 10^{-8}$ -40 to +85 °C

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						
<u>O</u> perating <u>T</u> emperature <u>R</u> ange	Code	EH	GH	JK	NK	NN	Z
°C		0 / +60	-10 / +60	-20 / +70	-40 / +70	-40 / +85	Custom
Frequency Stability		u10		50n		30n	
vs <u>O</u> perating <u>T</u> emperature <u>R</u> ange	Code	$\leq \pm 10 \times 10^{-8}$		$\leq 50 \times 10^{-9}$		$\leq 30 \times 10^{-9}$	
	Note 2						
vs. Supply Voltage change (Vdc $\pm 4\%$)		$\leq \pm 0.1 \times 10^{-6}$					
vs. Load change ($\pm 10\%$)		$\leq 3 \times 10^{-8}$					
vs. Aging after 30 days of operation 1 st year		$\leq 40\text{MHz}$	$\leq 3 \times 10^{-7}$	$\geq 40\text{MHz}$	$\leq \pm 1 \times 10^{-6}$		
vs. Aging after 30 days of operation 10 years		$\leq 40\text{MHz}$	$\leq 2.5 \times 10^{-6}$	$\geq 40\text{MHz}$	$\leq \pm 4 \times 10^{-6}$		
Short term stability (Allan variance @1s)		$< 1 \times 10^{-10}$ (Typ. : 5×10^{-11})					
Output waveform		HCMOS					
Output level		$V_{OL} < 0.4 \text{ V}$		$V_{OH} > 2.4 \text{ V}$			
Output load		15 pF					
Rise / Fall time		$< 7 \text{ ns}$					
Supply Voltage [Vdc]		+3.3 V $\pm 4\%$			+5.0 V $\pm 4\%$		
Warm-up current @ +25 °C still air		$< 350 \text{ mA}$			$< 300 \text{ mA}$		
Steady-state current @ +25 °C still air		$< 120 \text{ mA}$			$< 80 \text{ mA}$		
Warm-up time		$< 2 \text{ min}$		$< \pm 0.1 \times 10^{-6}$ @ +25 °C			
Electronic Frequency Control [EFC] range		$\leq 40\text{MHz}$	$\leq 2.5 \times 10^{-6}$	$\geq 40\text{MHz}$	$\leq \pm 4 \times 10^{-6}$		
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)

Dimensions



Pin function

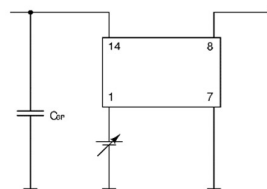
- # 1 Vc
- # 7 GND
- # 8 RF output
- # 14 Vdc

Ordering Guide:

OCO-M14H5-JK50n-40MHz

Vdc OTR

External voltage



External potentiometer

