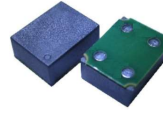
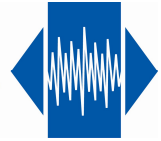


OCO-SM107H Preliminary

Small size OCXO HCMOS



QuartzCom
the communications company



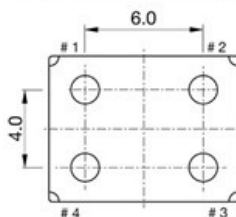
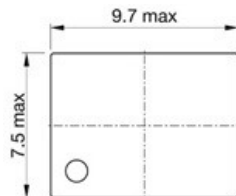
Features

- Low power consumption (0.4W)
- Wide Operating Temperature Range: $\leq \pm 20 \times 10^{-9}$ -40 to +85 °C

Parameter	Specification						
	OCO-SM107H3						
Frequency Range	10 MHz to 40 MHz						
Standard Frequencies	10.000, 12.800, 19.200, 20.000 , 25.000, 30.720 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							
vs <u>O</u> perating <u>T</u> emperature <u>R</u> ange	Code	40n		20n		10n	
		$\leq \pm 40 \times 10^{-9}$		$\leq \pm 20 \times 10^{-9}$		$\leq \pm 10 \times 10^{-9}$	
vs. Supply Voltage change (Vdc $\pm 5\%$)		$\leq \pm 5 \times 10^{-9}$					
vs. Load change ($\pm 5\%$)		$\leq \pm 5 \times 10^{-9}$					
vs. Aging after 30 days of operation		$\leq \pm 6 \times 10^{-7}$		1 st year			
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		$< 4 ns$					
Supply Voltage [Vdc]		+3.3 V $\pm 5\%$			+5.0 V $\pm 5\%$		
Warm-up current @ +25 °C still air		$< 350 mA$			Consult factory		
Steady-state current @ +25 °C still air		$< 130 mA$					
Warm-up time		$< 5 min$		$< \pm 0.1 \times 10^{-6}$ @ +25 °C			
Electronic Frequency Control [EFC] range		$> \pm 5 \times 10^{-6}$		positive slope			
Voltage Control (Vc)		0 ~ +3.3 V					
Input Impedance		100 k Ω					
Phase Noise @ 20 MHz			Typ.	Max.	Units		
		10Hz	-98	-92	dBc/Hz		
		100Hz	-125	-120			
		1kHz	-145	-140			
		10kHz	-152	-150			
Storage temperature range		-55 ~ +85 °C					
Reflow conditions per JEDEC J-STD-020		245 °C maximum			during 10 sec. Max.		

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

Dimensions



Pin function

- # 1 Vc or NC
- # 2 GND
- # 3 RF output
- # 4 Vdc

Aqueous cleaning is forbidden

Ordering Guide:

OCO-SM107H3-NN20n-20MHz

Vdc OTR

Test circuit

