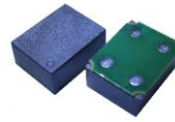


OCO-SM107H

Small size OCXO HCMOS



QuartzCom
the communications company



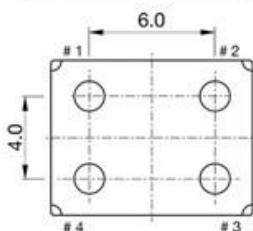
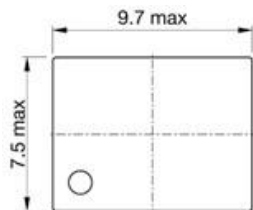
Features

- 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						
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	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 ± 5 %)	$\leq \pm 5 \times 10^{-9}$						
vs. Load change (± 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 ± 5 %			+5.0 V ± 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

