OCO-M20BH

OCXO HCMOS

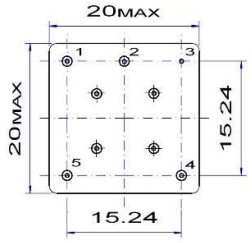
QuartzCom
the communications company

Features

- Frequency: 10MHz to 25 MHz
- Supply Voltage option: 3.3V 5.0V

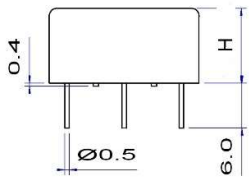
Parameter		Specification					
		OCO-M20BH3				OCO-M20BH5	
Frequency Range		10.000 ~ 25.000 MHz					
Standard Frequencies		10MHz 12.8MHz 13MHz 16.384MHz 20MHz					
Operating Temperature Range	Code	EH	GH	JK	NK	NN	Z
	°C	0 / +60	-10 / +60	-20 / +70	-40 / + 70	-40 / +85	Custom
Frequency Stability	**Code**	**50n**		**20n**		**10n**	
vs Operating Temperature Range	*Note 2	≤ ± 50 x 10^{-9}		≤ ± 20 x 10^{-9}		≤ ± 10 x 10^{-9}	
vs. Supply Voltage change [Vdc] ±5 %		≤ ± 5 x 10^{-9}					
vs. Load change ±5 %		≤ ± 5 x 10^{-9}					
vs. Aging after 30 days of operation	*Note 2	≤ ± 3 x 10^{-8} 1st year					
Short term Stability for Fo 10MHz	*Note 2	≤ 1 x 10^{-11} @ 1s					
Output waveform		HCMOS					
Output Level		V_{OL} <0.3V V_{OH} >3.0V				V_{OL} <0.5V V_{OH} >4.5V	
Output Load		10kΩ / 15pF					
Supply Voltage [Vdc]		**+3.3 V ±5 %**				**+5.0 V ±5 %**	
Steady-state current consumption @ +25 °C		< 250 mA				< 150 mA	
Warm-up current consumption @ +25 °C		< 700 mA				< 450 mA	
Warm-up time @ +25 °C		< 180s				< ±1 x 10^{-7}	
Electronic Frequency Control [EFC] range		> ±5 x 10^{-7} positive slope					
Voltage Control [Vc]		0 ~ +3.0 V				0 ~ +4.5 V	
Reference voltage output [Vref]		+3.0 V				+4.5 V	
Phase Noise @ 10MHz [dBc/Hz]			HCMOS				
		Option	**≤ 13MHz**			**>13MHz**	
		10 Hz	≤ -120			≤ -105	
		100 Hz	≤ -140			≤ -125	
		1 kHz	≤ -145			≤ -135	
		10 kHz	≤ -150			≤ -145	
		100 kHz	≤ -150			≤ -145	
Storage temperature range		-55 ~ +80 °C					
Environmental test							
Vibration		acceleration: 10 g; 10 Hz up to 500 Hz and down to 10 Hz; all 3 axes					
Shock		75 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 # Vdc
2 # RF output
3 # GND
4 # Vc
5 # Vref



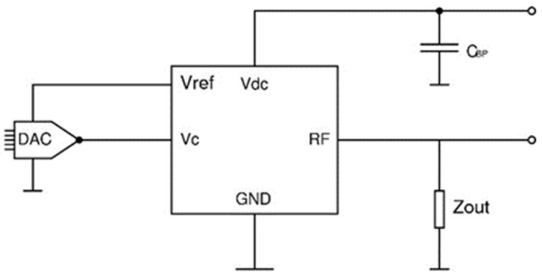
H = 12.7 mm

Ordering Guide:

OCO-M20BH3-NK20n-10MHz

Vdc OTR

Connection circuit



Zout = 10kΩ / 15pF

QuartzCom AG
Bruehlstrasse 1
CH 2540 Grenchen
Switzerland

Fax +41 32 644 05
Tel +41 32 644 00
E-mail sales@quartzcom.com
Web www.quartzcom.com