OCO-M25A

OCXO HCMOS / Sine Wave

QuartzCom
the communications company

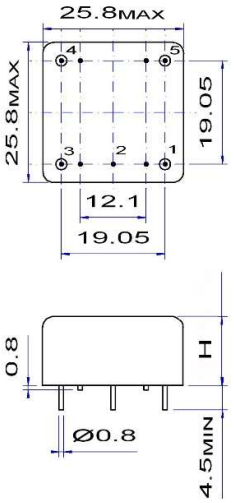
Features

- Frequency: 10MHz to 30 MHz
- Supply Voltage option: 3.3V 5.0V 12.0V

Parameter	Specification					
	OCO-M25A3		OCO-M25A5		OCO-M25A12	
Frequency Range	10.000 ~ 30.000 MHz					
Standard Frequencies	10MHz 12.8MHz 13MHz 16.384MHz 20MHz 25MHz 30MHz					
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 ±10 %	≤ ± 5 x 10^{-9}					
vs. Aging after 30 days of operation *Note 2	≤ ± 3 x 10^{-8} 1st year					
Short term Stability for Fo 13MHz *Note 2	≤ 1 x 10^{-11} @ 1s					
Output waveform	**Sine wave [S]**			**HCMOS [H]**		
Output Level	> 225 mV RMS			V_{OL} < 0.4 V V_{OH} > 2.4 V / 4.0V		
Output Load	50Ω ±10 %			10 kΩ / 15 pF		
Harmonics	< - 30 dBc			NA		
Supply Voltage [Vdc]	**+3.3 V ±5 %**		**+5.0 V ±5 %**		**+12.0 V ±5 %**	
Steady-state current consumption @ +25 °C	< 450 mA		< 200 mA		< 80 mA	
Warm-up current consumption @ +25 °C	< 1000 mA		< 600 mA		< 300 mA	
Warm-up time @ +25 °C	< 120s < ±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		0 ~ +5.0 V	
Reference voltage output [Vref]	+3.0 V		+4.5 V		+5.0 V	
Phase Noise @ 10MHz [dBc/Hz]		**SINE**				**HCMOS**
	Option	**-**		**LN ≤13MHz**		
	10 Hz	≤ -120		≤ -125		≤ -120
	100 Hz	≤ -140		≤ -145		≤ -140
	1 kHz	≤ -150		≤ -150		≤ -145
	10 kHz	≤ -155		≤ -155		≤ -150
	100 kHz	≤ -155		≤ -155		≤ -150
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	100 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 # RF output
2 # GND
3 # Vc
4 # Vref
5 # Vdc

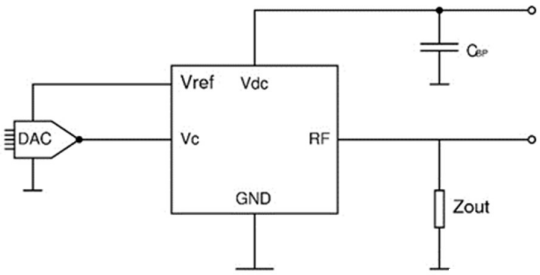
H = 12.7 mm

Ordering Guide:

OCO-M25AS5-JK10n-LN-10MHz

Vdc OTR Phase Noise

Connection circuit



Zout = 50Ω
10 kΩ / 15pF

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