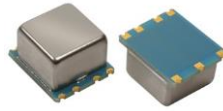


OCO-SMAS

SMD OCXO Sine Wave



QuartzCom
the communications company



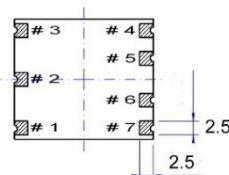
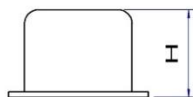
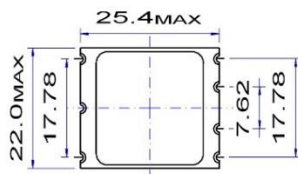
Features

- Frequency: 10.000 MHz to 40.000 MHz
- Supply Voltage option: 3.3V & 5.0V

Parameter	Specification							
	OCO-SMAS3			OCO-SMAS5				
Frequency Range	10.000 ~ 40.000 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		5n0		
		vs. Operating Temperature Range *Note 2 vs. Supply Voltage change [Vdc] ±5 % vs. Load change ±5 % vs. Aging after 30 days of operation *Note 2						
		$\leq \pm 50 \times 10^{-9}$		$\leq \pm 20 \times 10^{-9}$		$\leq \pm 5 \times 10^{-9}$		
		$\leq \pm 3 \times 10^{-9}$						
		$\leq \pm 3 \times 10^{-9}$						
		Fn ≤ 20MHz : $\leq \pm 3 \times 10^{-8}$ / year			Fn > 20MHz : $\leq \pm 1 \times 10^{-7}$ / year			
Short term Stability for Fo 10MHz	*Note 2	$\leq 5 \times 10^{-12}$ @ 1s						
Output waveform	Sine wave							
Output Level	> 225 mV RMS							
Output Load	50Ω ±5 %							
Harmonics	< -30 dBc							
Supply Voltage [Vdc]	+3.3 V ±5 %			+5.0 V ±5 %				
Steady-state current consumption @ +25 °C	< 300 mA			< 200 mA				
Warm-up current consumption @ +25 °C	< 750 mA			< 600 mA				
Warm-up time @ +25 °C	< 180s			< ±1 × 10 ⁻⁷				
Electronic Frequency Control [EFC] range	> ±5 × 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]	Option	Vdc +3.3 V			Vdc +5.0 V			
		1 Hz	LN	ULN	LN	ULN		
		10 Hz	≤ -115	≤ -115	≤ -125	≤ -120	≤ -120	≤ -130
		100 Hz	≤ -130	≤ -135	≤ -140	≤ -135	≤ -150	≤ -145
		1 kHz	≤ -140	≤ -145	≤ -145	≤ -145	≤ -150	≤ -150
		10 kHz	≤ -145	≤ -150	≤ -150	≤ -150	≤ -155	≤ -155
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 Vc.
- # 2 Vref.
- # 3 Vdc.
- # 4 RF output
- # 5 Not connected
- # 6 Not connected
- # 7 GND

H = 14.0 mm

Ordering Guide:

OCO-SMAS5-JK20n-ULN-10MHz

Vdc OTR Phase Noise

Connection circuit

