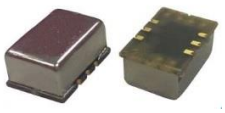
OCO-SM149H

Small size OCXO HCMOS



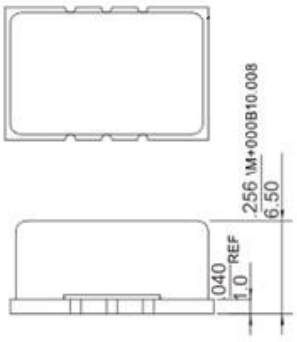
Features

- Low power consumption (0.6W)
- Wide Operating Temperature Range: ≤ ±20 x 10^{-9} -40 to +85 °C

Parameter	Specification					
	OCO-SM149H3					
Frequency Range	10 MHz to 40 MHz					
Standard Frequencies	10.000, 12.800, 19.200, **20.000**, 25.000, 38.880 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**	
	≤ ± 40 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 %)	≤ ±10 x 10^{-9}					
vs. Aging after 30 days of operation	≤ ±4 x 10^{-7} 1st year			≤ ±2 x 10^{-6} 10 years		
Short term stability (Allan variance @1s)	< 1 x 10^{-10} (Typ. : 5 x 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	< 600 mA			Consult factory		
Steady-state current @ +25 °C still air	< 185 mA					
Warm-up time	< 5 min		< ± 0.1 x 10^{-6} @ +25 °C			
Electronic Frequency Control [EFC] range	> ± 5 x 10^{-6} positive slope					
Voltage Control (Vc)	0 ~ +3.3 V					
Input Impedance	100 kΩ					
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.**		

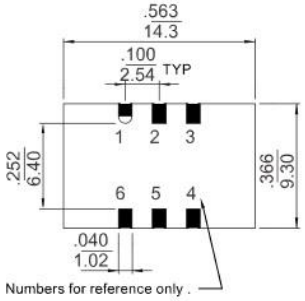
Note 1: unless otherwise specified conditions are @ 25°C still air

Dimensions



Pin function

1 Vc or NC
2 RF Enable
3 GND
4 RF Output
5 NC
6 Vdc

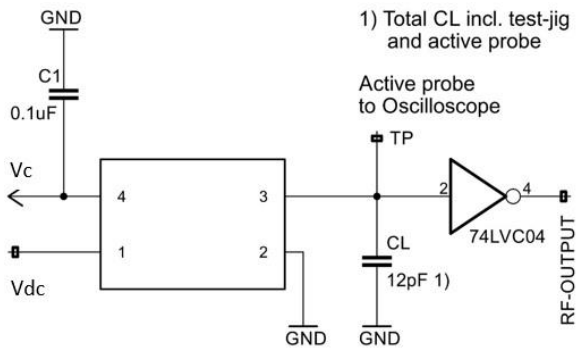


Ordering Guide:

OCO-SM149H3-NN20n-20MHz

Vdc OTR

Test circuit



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