

OCO-M36CEH

OCXO HCMOS



Features

- High frequency stability vs. temperature
- Wide operating temperature range: -40 up to +85 °C

Parameter	Specification					
	OCO-M36CEH5			OCO-M36CEH12		
Frequency Range	10.000 ~ 40.000 MHz					
Standard Frequencies	10.0, 12.80, 13.00, 15.36, 16.384, 20.00, 26.00, 32.768 MHz					
Operating Temperature Range	Code	°C	EH	GH	JK	NK
			0 / +60	-10 / +60	-20 / +70	-40 / +70
Frequency Stability						
vs Operating Temperature Range	Code	20n		10n		7n5
		≤ ±20 x 10 ⁻⁹		≤ ±10 x 10 ⁻⁹		≤ ±7.5 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	≤ ±3 x 10 ⁻⁸		1 st year			
Short term stability (Allan variance @1s)	< 2 x 10 ⁻¹¹					
Output waveform	HCMOS					
Output level	VOL < 0.5 V VOH > 4.0 V					
Output load	10 kΩ // 15 pF ±5 %					
Supply Voltage [Vdc]	+5.0 V ±5 %			+12 V ±5 %		
Steady-state current consumption @ +25 °C	< 400 mA			< 150 mA		
Warm up current consumption @ +25 °C	< 1000 mA			< 400 mA		
Warm-up time	< 3 min		< ±1 x 10 ⁻⁷ @ +25 °C			
Electronic Frequency Control [EFC] range	> ±5 x 10 ⁻⁷		positive slope			
Voltage Control [Vc]	0 ~ +4.5 V			0 ~ +5.0 V		
Reference voltage output [Vref]	+4.5 V			+5.0 V		
Phase Noise @ 20 MHz carrier frequency	< -105 dBc/Hz @ 10 Hz		< -135 dBc/Hz @ 100 Hz			
	< -135 dBc/Hz @ 1 kHz		< -145 dBc/Hz @ 10 kHz			
	< -145 dBc/Hz @ 10 kHz		< -150 dBc/Hz @ 10 kHz			
Storage temperature range	-55 ~ +85 °C					

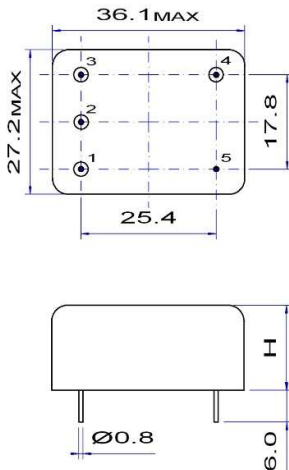
Environmental test

Vibration	acceleration: 5 g; 10 Hz up to 500 Hz and down to 10 Hz; all 3 axes
Shock	10 g, half-sine, 3 ms

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

Pin Function

- Vc
- Vref
- Vdc
- RF Output
- GND



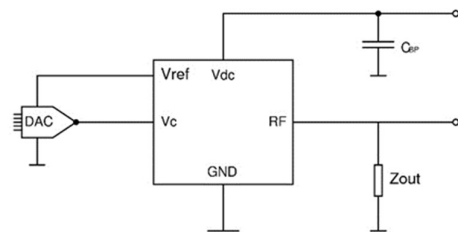
Height H = 16 mm

Ordering Guide:

OCO-M36CEH5-JK10n-10MHz

Vdc OTR

Connection circuit



Zout = 10kΩ // 15pF