

OCO-M36CH

Through hole OCXO
HCMOS

QuartzCom
the communications company

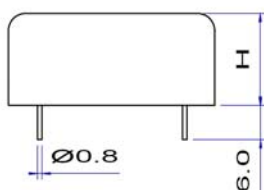
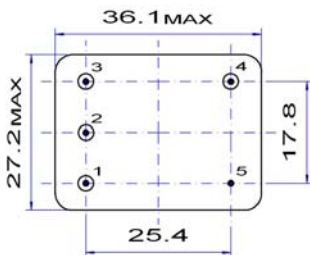


Features

- Applications: CDMA, networking, instrumentation
- High frequency stability vs. temperature (up to $\pm 5 \times 10^{-9}$)
- Wide operating temperature range: -40 up to +85 °C
- Low aging

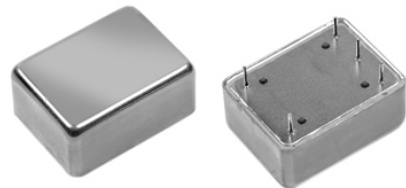
Parameter	Specification	
	OCO-M36CH3	OCO-M36CH5
Frequency range	5.0000 ~ 10.0000 MHz	
Standard frequencies	5.0000, 8.1920 & 10.00 MHz	
Frequency stability vs. operating temperature range	$\leq \pm 1 \times 10^{-8}$	over -40 ~ +85 °C
	$\leq \pm 5 \times 10^{-9}$	over -20 ~ +70 °C
	$\leq \pm 5 \times 10^{-9}$	over -10 ~ +60 °C
vs. supply voltage change	$\leq \pm 5 \times 10^{-9}$	$\pm 5 \%$
vs. load change	$\leq \pm 5 \times 10^{-9}$	$\pm 5 \%$
vs. aging after 30 days of operation	$\leq \pm 2 \times 10^{-8}$	1 st year
Short term stability	$< 2 \times 10^{-11}$	Allan deviation per 1 s
Output waveform	HCMOS	$V_{OH} \geq 0.9 \text{ Vdc}$ $V_{OL} \leq 0.1 \text{ Vdc}$
Output load	10 k Ω / 15 pF	
Supply voltage	+3.3 V $\pm 5 \%$	+5.5 V $\pm 5 \%$
Steady-state current consumption @ +25 °C	< 380 mA	< 300 mA
Warm up time	< 3 min	$< \pm 1 \times 10^{-7}$ @ +25 °C
Frequency pulling range	$> \pm 5 \times 10^{-7}$	positive slope
Vcontrol (Vc) via external voltage	0 ~ +3.0 V	0 ~ +4.5 V
Phase noise @ 10 MHz carrier frequency	$< -115 \text{ dBc/Hz}$ @ 10 Hz $< -135 \text{ dBc/Hz}$ @ 100 Hz $< -145 \text{ dBc/Hz}$ @ 1 kHz $< -150 \text{ dBc/Hz}$ @ 10 kHz	
Operating temperature range	-10 ~ +60 °C, -20 ~ +70 °C, -40 ~ +70 °C or -40 ~ +85 °C	
Storage temperature range	-55 ~ +85 °C	
Case height (H)	15.0 mm	

Environmental test	
vibration	acceleration: 10 g; 10 Hz up to 500 Hz and down to 10 Hz; all 3 axes, 4.5 h/axis
shock	100 g, half-sine, 3 ms (3 shocks each, 6 directions)

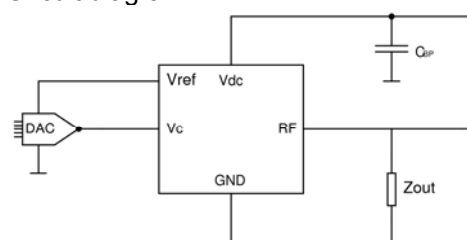


Pin function

- # 1 Vc
- # 2 Oven alarm
- # 3 Vdc
- # 4 RF output
- # 5 GND



Circuit diagram



$C_{BP} = 0.01 \text{ mF}$

$Z_{out} = 10 \text{ k}\Omega / 15 \text{ pF}$

2002/95/EC RoHS compliant

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ISO 9001
BUREAU VERITAS
Certification

12 May, 10

