

OCO-M25AS

Through hole OCXO
HCMOS

QuartzCom
the communications company



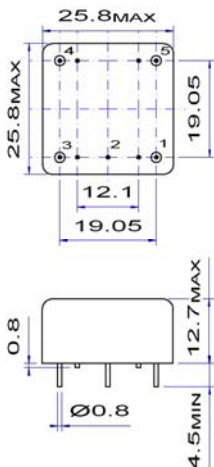
Features

- Applications: CDMA, 3G, base station, networking, instrumentation
- High frequency stability vs. temperature
- Wide operating temperature range: -40 up to +85 °C
- Low aging

Parameter	Specification	
	OCO-M25AS5	OCO-M25AS12
Frequency range	10.0000 ~ 30.0000 MHz	
Standard frequencies	10.00, 12.80, 13.00, 16.384, 20.00, 25.00 & 30.00 MHz	
Frequency stability vs. operating temperature range	$\leq \pm 2 \times 10^{-8}$	over -40 ~ +85 °C
	$\leq \pm 1 \times 10^{-8}$	over -40 ~ +70 °C
	$\leq \pm 5 \times 10^{-9}$	over -20 ~ +70 °C
vs. supply voltage change	$\leq \pm 5 \times 10^{-9}$	$\pm 5 \%$
vs. load change	$\leq \pm 5 \times 10^{-12}$	$\pm 5 \%$
vs. aging after 30 days of operation	$\leq \pm 3 \times 10^{-8}$	1 st year
Output waveform	sine wave	> 225 mV (rms)
Output load	50 Ω	$\pm 10 \%$
Supply voltage (*)	+5.0 V $\pm 5 \%$	+12 V $\pm 5 \%$
Steady-state current consumption @ +25 °C	< 200 mA	< 80 mA
Warm-up time	< 2 min	< $\pm 1 \times 10^{-7}$ @ +25 °C
Frequency pulling range	> $\pm 5 \times 10^{-7}$	positive slope
Vcontrol (Vc) via external voltage	0 ~ +4.5 V	0 ~ +5.0 V
Vcontrol (Vc) via external potentiometer	20 k Ω	
Reference voltage output (Vref)	+4.5 V	+5.0 V
Harmonics	< -30 dBc	
Phase noise @ 13 MHz carrier frequency	< -120 dBc/Hz	@ 10 Hz
	< -140 dBc/Hz	@ 100 Hz
	< -150 dBc/Hz	@ 1 kHz
	< -155 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	

(*) 3.3 V supply voltage on request

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)

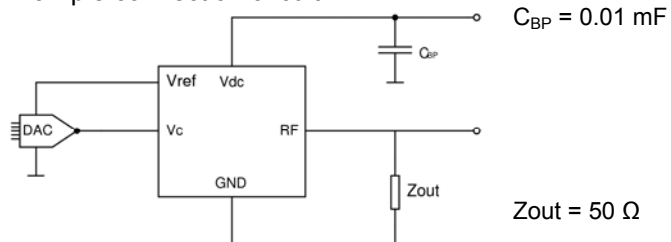


Pin function

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



Example connection circuit



2002/95/EC RoHS compliant