

# OCO-SMBS

SMD OCXO  
Sine wave

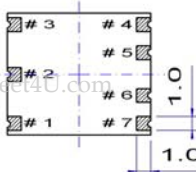
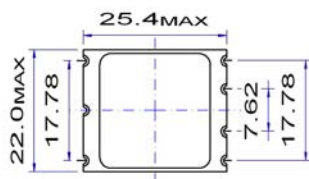
QuartzCom  
the communications company



## Features

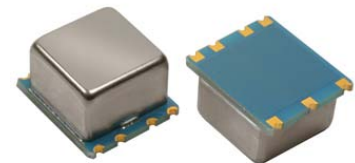
- Applications: GPS, CDMA, 3G, networking, instrumentation
- SMD packaged precision OCXO
- High frequency stability vs. temperature
- Supply voltage: 3.3 V or 5.0 V

Parameter	Specification	
Frequency range	10.0000 ~ 20.0000 MHz	
Standard frequencies	10.000, 12.800, 13.000, 16.384 & 20.000 MHz	
Frequency stability vs. operating temperature range	$\leq \pm 1 \times 10^{-8}$	over -40 ~ +70 °C
	$\leq \pm 5 \times 10^{-9}$	over -20 ~ +70 °C
vs. supply voltage change	$\leq \pm 5 \times 10^{-10}$	$\pm 5 \%$
vs. load change	$\leq \pm 5 \times 10^{-10}$	$\pm 5 \%$
vs. aging after 30 days of operation	$\leq \pm 3 \times 10^{-8}$	1 <sup>st</sup> year
Short term stability	$< 5 \times 10^{-12}$	Allan deviation per 1 s
Output waveform	sine wave	
Output level (rms)	> 400 mV	
Output load	50 $\Omega$	$\pm 5 \%$
Supply voltage	+12 V	$\pm 5 \%$
Steady-state current consumption @ +25 °C	< 270 mA	
Warm-up time	< 3 min	$< \pm 1 \times 10^{-7}$ @ +25 °C
Frequency pulling range	$> \pm 0.5 \times 10^{-7}$	positive slope
Vcontrol (Vc) via external voltage	0 ~ +5 V	
Vcontrol (Vc) via external potentiometer	20 k $\Omega$	
Reference voltage output (Vref)	+5.0 V	
Phase noise @ 10 MHz carrier frequency	< -100 dBc/Hz	@ 1 Hz
	< -130 dBc/Hz	@ 10 Hz
	< -145 dBc/Hz	@ 100 Hz
	< -150 dBc/Hz	@ 1 kHz
	< -150 dBc/Hz	@ 10 kHz
Operating temperature range	-20 ~ +70 °C or -40 ~ +70 °C	
Storage temperature range	-55 ~ +85 °C	
Case height (H)	12.5 mm or 14.0 mm	

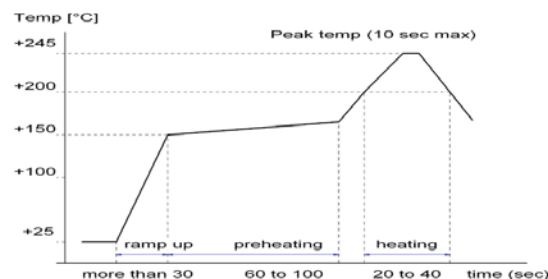


## Pin function

- # 1 Vc
- # 2 Vref
- # 3 Vdc
- # 4 RF output
- # 5 not connected
- # 6 not connected
- # 7 GND



## Example for IR reflow soldering temperature



www.DataSheet4U.com

2002/95/EC RoHS compliant

QuartzCom AG  
sales@quartzcom.com

QuartzCom Asia  
sales-asia@quartzcom.com

QuartzCom USA  
sales-usa@quartzcom.com

[www.quartzcom.com](http://www.quartzcom.com)

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