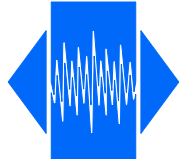


VT7-705-TQ-HP

High precision, reliable, temperature compensated
SMD VC-TCXO

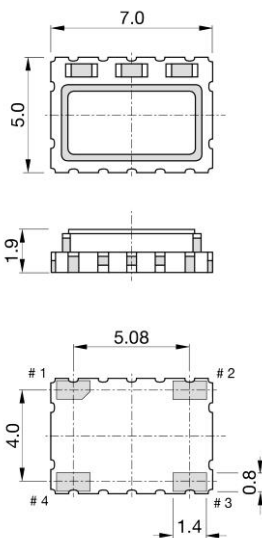
QuartzCom
the communications company



Features

- Applications: instrumentation, mobile radio, satellite navigation
- High frequency stability vs. temperature: $\pm 0.10 \sim \pm 0.5$ ppm
- Output signal clipped sine wave or CMOS
- Low phase noise, high reliability

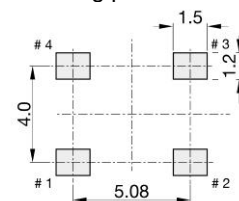
Parameter	Specification		
Frequency range	5 ~ 52 MHz		
Standard frequencies	5.0, 10.0, 12.0, 12.8, 13.0, 15.36, 16.0, 16.384, 18.432, 19.20, 19.44, 20.0, 25.0, 26.0, 30.72, 32.0, 40.0, 49.152 & 50.0 MHz		
Frequency stability:			
Frequency stability vs. temperature reference to $(F_{MAX}+F_{MIN})/2$	$\leq \pm 0.28$ ppm & $\leq \pm 0.50$ ppm	-40 ~ +85 °C	standard
vs. supply voltage changes reference to frequency at nominal supply	$\leq \pm 0.05$ ppm	± 5 %	
vs. aging	$\leq \pm 1.0$ ppm		1 st year
G-sensitivity	< 1.5 ppb/g < 0.3 ppb/g	Gamma Γ	standard on request
Frequency tolerance ex. factory @ +25 °C	$\leq \pm 1.0$ ppm standard	$\leq \pm 0.5$ ppm on request	
Supply voltage (nominal value ± 5 %)	+2.8 V or +5.0 V standard 2.8 V, 3.0 V, 3.3 V & 5.0 V		
Output signal	clipped sine wave	CMOS	
Output level	> 0.8 Vp-p	$V_{OH} > 0.9 \times V_{dc} / V_{OL} < 0.1 \times V_{dc}$	
Output load	10 k Ω // 10 pF	15 pF Max.	
Current consumption	1.5 ~ 4 mA	2 ~ 6 mA	
Electronic Frequency Control (EFC) range	$\pm 5 \sim \pm 10$ ppm		
EFC voltage (Vc)	+1.5 V ± 1.0 V	or +2.5 V ± 2.0 V for 5.0 V supply voltage	
Phase noise @ 20.0 MHz	< -145 dBc/Hz < -155 dBc/Hz	@ 1 kHz @ 10 kHz	
Operating temperature range	-20 ~ +70 °C -40 ~ +85 °C -55 ~ +95 °C	indoor application outdoor application extended temperature range	
Storage temperature range	-55 ~ +105 °C		
Reflow Profiles as per IPC/JEDEC J-STD-020C	≤ 260 °C over 10 sec. Max.		
Moisture sensitivity	Level 1 (unlimited)		
Customer specifications on request			



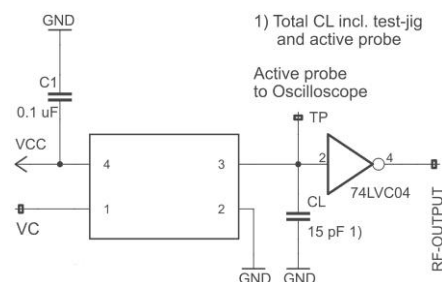
Pin function

- # 1 Vc (EFC)
- # 2 GND
- # 3 Output
- # 4 Vcc

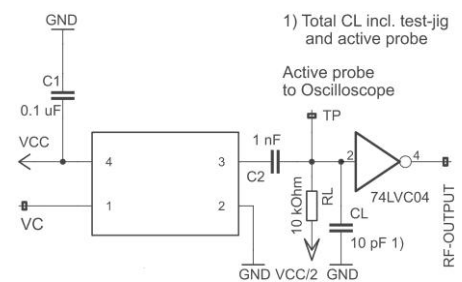
Soldering pattern



Test circuit for CMOS



Test circuit for clipped sine wave



2011/65/EU RoHS compliant

24 Aug. 18