VT7-705-TQ-HP

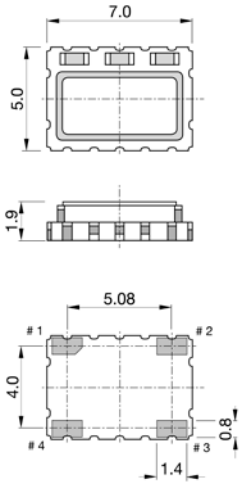
High precision analogue temperature compensated SMD VC-TCXO

QuartzCom the communications company

Features

- Applications: instrumentation, synchronisation, satellite navigation
- High frequency stability vs. temperature: ± 0.10 ~ ± 0.5 ppm
- Output signal Clipped sine wave or CMOS
- Low phase noise, high reliability

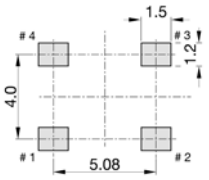
Standard frequencies	**10, 12.2880, 12.8, 16.384, 16.368, 20, 25, 30, 32, 32.768, 33.6, 40, 49.152 & 50 MHz**		
Frequency range	**5.0 ~ 52.0 MHz**		
Frequency stability vs. temperature reference to (FMAX+FMIN)/2	≤ ±0.5 ppm ≤ ±0.2 ppm ≤ ±1.0 ppm	over -40 to +85 °C over -40 to +85 °C over -55 to +95 °C	standard on request on request
vs. supply voltage changes reference to frequency at nominal supply	≤ ±0.05 ppm	±5 %	
vs. load changes reference to frequency at nominal load	≤ ±0.05 ppm	±10 %	
vs. aging	≤ ±1.0 ppm	1st year	
Frequency slope	≤ 0.05 ppm/°C	over operating temperature	
G-sensitivity	< 1.5 ppb/g < 0.5 ppb/g	Gamma Γ Gamma Γ	standard on request
Short term stability (ADEV)	< 1 x 10^{-10}	τ = 1 s	
Supply voltage (nominal value needs to be defined)	+2.7 V to +5.0 V	(2.7 V, 3.0 V, 3.3 V & 5.0 V)	
Supply current	1.5 ~ 8 mA	10 MHz ~ 52 MHz	
Output signal	Clipped sine wave	CMOS	
Output level	> 0.8 Vp-p	V_{OH} > 0.9 x Vdc / V_{OL} < 0.1 x Vdc	
Output load	10 kΩ // 10 pF	≤ 15 pF	
Symmetry (duty cycle)		45 / 55 % @ ½ Vdc	
Electronic Frequency Control (EFC) range	±5 ~ ±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	< -125 dBc/Hz < -145 dBc/Hz < -155 dBc/Hz	@ 100 Hz @ 1 kHz @ 10 kHz	
Operating temperature range	-20 ~ +70 °C -40 ~ +85 °C -55 ~ +95 °C	indoor outdoor (extended temperature range on request)	
Storage temperature range	-55 ~ +125 °C		
Reflow Profiles as per IPC/JEDEC J-STD-020C	≤ 260 °C over 10 sec. Max.		
Moisture sensitivity	Level 1 (unlimited)		



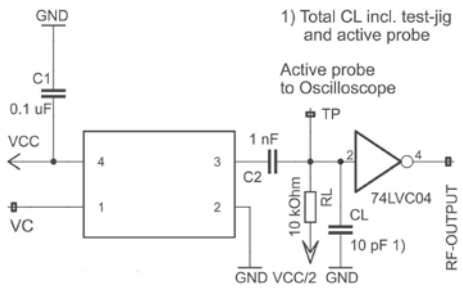
Pin function

# 1	Vc (Voltage control)
# 2	GND
# 3	Output
# 4	Vdc

Soldering pattern



Test circuit (CSW)



QuartzCom AG
Bischmattstrasse 11
CH 2544 Bettlach
Switzerland

Fax +41 32 644 24 05
Tel +41 32 644 24 00
E-Mail sales@quartzcom.com
www.quartzcom.com