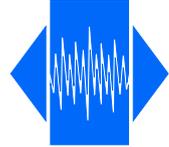


TX14T

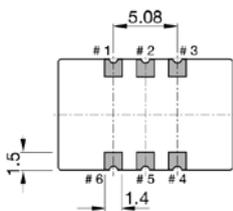
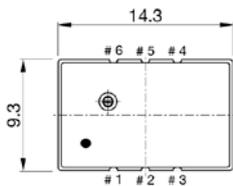
High accurate, reliable
(LV)HCMOS or Sine wave TCXO with internal trimmer



Frequency range	10.000 to 100.000 MHz		
Standard frequencies	10, 20, 25, 32, , 38.88, 40, 48, 50, 60, 100 MHz		
Frequency stability:			
vs. temperature referenced to (F _{MAX} +F _{MIN})/2	≤ ±0.5 ppm	over -40 to +85 °C	(*)
vs. supply voltage changes referenced to frequency at nominal supply	≤ ±0.05 ppm	±5 %	
vs. load changes referenced to frequency at nominal load	≤ ±0.05 ppm	±10 %	
vs. aging @ +40 °C	≤ ±1.0 ppm	1 st year	
G-sensitivity	2.0 ppb/g	per axis	
Short term stability ADEV	< 1*10 ⁻¹⁰	τ = 1.0 s	
Frequency tolerance ex factory	0 ~ +1.0 ppm	@ +25 °C	
Supply voltage	+3.3 V or 5.0 V		(*)
Output signal	Sine wave	(LV)HCMOS	(*)
Frequency range	20 to 100 MHz	10 to 100 MHz	
Output level	+3 to +6 dBm	VOH > 0.9*V _{CC} / VOL < 0.1*V _{CC}	
Output load	50 Ω	15 pF max.	
Current consumption	< 15 mA	< 10 mA	
Frequency adjustment (trimming)	≥ 5 ppm	by internal trimmer	
Phase noise (typical value for 40 MHz)	-85 dBc/Hz	@ 10 Hz	
	-112 dBc/Hz	@ 100 Hz	
	-140 dBc/Hz	@ 1 kHz	
	-150 dBc/Hz	@ 10 kHz	
	-154 dBc/Hz	@ 100 kHz	
	-155 dBc/Hz	@ 1 MHz	
Operating temperature range	-40 ~ +85 °C		(*)
Reflow profiles as per IPC/JEDEC J-STD-020C	≤ 245 °C over 10 s max.		

(*) See available options on page #2

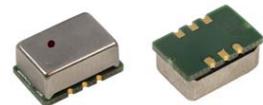
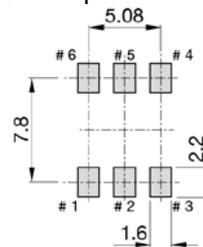
Note: Unless otherwise specified conditions are @+25 °C



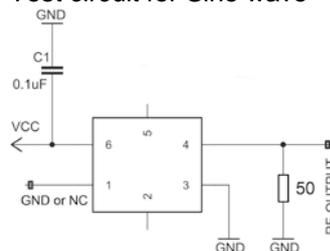
Pin function

- # 1 GND or NC
- # 2 NC or GND
- # 3 GND
- # 4 RF output
- # 5 NC or GND
- # 6 Vcc

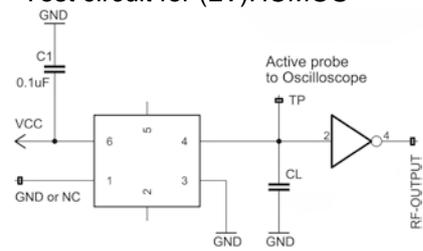
Solder pattern



Test circuit for Sine wave



Test circuit for (LV)HCMOS

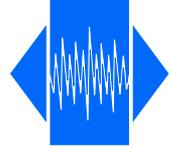


TX14T

High accurate, reliable

(LV)HCMOS or Sine wave TCXO with internal trimmer

QuartzCom
the communications company



Ordering code

TX14T-(1)(2)-(3)(4)-50.000MHz

Example: TX14T-H33-EKu50-50.000MHz

Oscillator type	(1) Output signal	(2) Supply voltage	(3) Operating temperature
TX = TCXO	H = (LV)CMOS S = Sine wave	33 = 3.3 V 50 = 5.0 V	EK = -0 to +70 °C JK = -20 to +70 °C NN = -40 to +85 °C NP = -40 to +95 °C NR = -40 to +105 °C QN = -55 to +85 °C
		(4) Frequency stability	
		u10 = ± 0.10 ppm u25 = ± 0.25 ppm u50 = ± 0.50 ppm 1u0 = ± 1.00 ppm 1u5 = ± 1.50 ppm	

Frequency stability vs. temperature

ppm	≤± 0.10	≤± 0.25	≤± 0.50	≤± 1.00	≤± 1.50
-20 to +70 °C	Δ	○	○	○	○
-40 to +85 °C	Δ	Δ	○	○	○
-40 to +95 °C	Δ	Δ	Δ	Δ	○
-40 to +105 °C	Δ	Δ	Δ	Δ	Δ
-55 to +85 °C	X	X	Δ	Δ	Δ

Δ Ask factory
○ Available
X Not available

Absolute max. ratings

Supply voltage (Vcc)	6.0 V
Storage temperature range	-55 ~ +105 °C
Control voltage (Vc)	0 / Vcc

