Oscillator specification: PTOC32227.003
Custom designation:

F O Q PIEZO TECHNIK

Supervision by:

Date , Sign. : 22.09.06 Timo Reinhardt

TYP: OCXO with 10,000000 MHz

1. Electrical Parameters

Supply / Power:	
Supply Voltage:	5 V ± 5 %
Max. Current Consumption @ 25 °C:	250 mA
Max. Current Consumption during warm up:	600 mA
Warm Up Time: (from 25 °C)	≤6 minutes to ±0,1 ppm
Nominal Frequency (f0):	10,000000 MHz
@ Reference Temperature:	25 °C ± 3 °C
@ Reference Control Voltage:	2,5 V
Temperature Range:	
Operating Temperature Range 1:	0 °C ... 70 °C
Operable Temperature Range:	-10 °C ... 70 °C
Storage Temperature Range:	-55 °C ... 105 °C
Frequency Tolerance:	
Nominal Frequency Tolerance (Δf/f0):	≤ ± 0,1 ppm @ Vc = 2,5 V
Tolerance vs Temperature Range 1 (Δf/f):	≤ ± 0,01 ppm
Tol. vs Supply Voltage (Δf/f) @ 5% Supply Change:	≤ ± 0,001 ppm
Tolerance vs Load (Δf/f) @ 10% Load Change:	≤ ± 0,001 ppm
Aging:	
After 30 Days of Continuous Operation:	
Aging Tolerance per day (Δf/f):	≤ ± 0,0005 ppm
Aging Tolerance 1. Year (Δf/f):	≤ ± 0,1 ppm
Aging Tolerance after 10 Years (Δf/f):	≤ ± 0,4 ppm
Short Term Stability:	
Allan Variance $1\sigma^2(\tau)$:	≤ ± 5E-11 / 1 s

Tuning range:

Method:	External Trimmer
Control Voltage = 0 V (Δf/f):	-1 ppm ... -2 ppm
Control Voltage = 2,5 V ((Δf/f):	-0,1 ppm ... +0,1 ppm
Control Voltage = 5 V ((Δf/f):	1 ppm ... 2 ppm
Linearity:	≤ ± 10 %
Input Impedance:	> >100 kOhm
Cut-off Frequency (3dB):	3 kHz

Output:

Output signal:	HCMOS
Load:	50 pF
Output level:	low ≤,5 V high ≥4,3 V
Rise-/Falltimetime	10ns / 10 ns (10% to 90%)
Output level:	low ≤,5 V high ≥4,3 V

Phase noise

	at 1 Hz <= -80 dBc/Hz
	at 10 Hz <= -120 dBc/Hz
	at 100 Hz <= -140 dBc/Hz
	at 1 kHz <= -145 dBc/Hz
	at 10 kHz <= -150 dBc/Hz

Others:

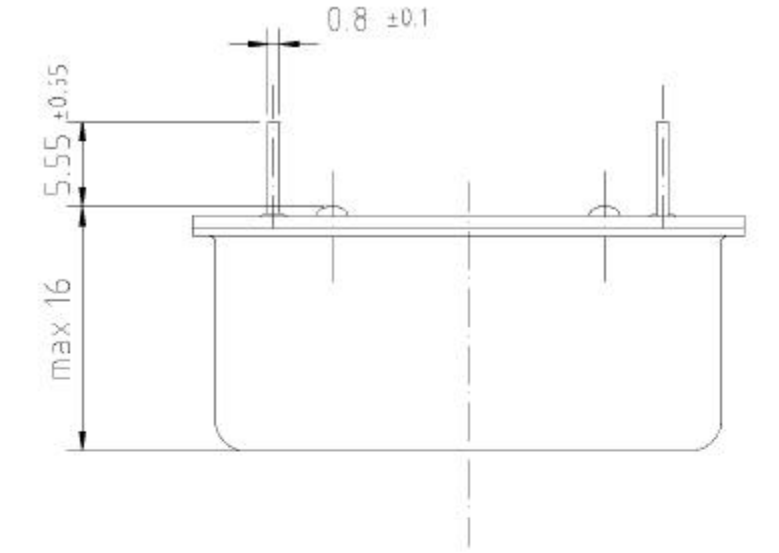
Frequency tolerance after turn on f@1h-f@15min: ±10ppb
Retrace: ±10ppb (f1-f2) =>48h on, measure f1; 24 off, 1h on, measure f1

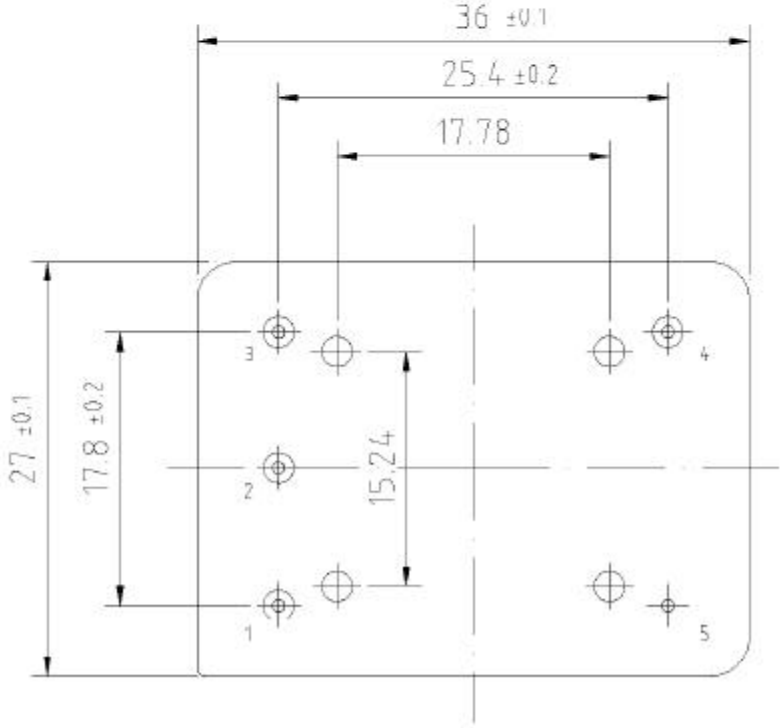
2. Mechanical Data

Case:	CO-08_9
Pin Connections:	1:VC; 2:NC; 3:VS; 4:HF; 5:GND

3. Marking:

FOQ Piezo Technik
PTOC32227
<FREQUENZ> MHz
<DC>LF <SN>


0.8 ±0.1
5.55 ±0.35
max 16


36 ±0.1
25.4 ±0.2
17.78
27 ±0.1
17.8 ±0.2
15.24
1
2
3
4
5