Oscillator specification: PTOC32227.003
Custom designation:  

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):
@ Reference Temperature: 10,000000 MHz
@ Reference Control Voltage: 25 °C ± 3 °C

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 τc°(1): ≤ ± 5E-11 / 1 s
Tuning range:

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

Output:

- Output signal: HCMOS
- Load: 50 pF
- Output level:
  - low $\leq 5$ V
  - high $\geq 4,3$ V
- Rise-/Falltime:
  - 10 ns / 10 ns (10% to 90%)
- Output level:
  - low $\leq 5$ V
  - high $\geq 4,3$ V

Phase noise:

- at 1 Hz $\leq -80$ dBc/Hz
- at 10 Hz $\leq -120$ dBc/Hz
- at 100 Hz $\leq -140$ dBc/Hz
- at 1 kHz $\leq -145$ dBc/Hz
- at 10 kHz $\leq -150$ dBc/Hz

Others:

- Frequency tolerance after turn on f@1h-f@16min: $\pm10$ ppb
- Retrace: $\pm10$ ppb (f1-f2) => 48 h on, measure f1, 24 off, 1h on, measure f1

2. Mechanical Data

- Case: CO-08_9

3. Marking:

- FQ Piezo Technik
- PTOC32227
- <$FREQUENZ>$ MHz
- <$DC>$ LF <$SN>$