

« Stratum 3E » OCXO – GR-1244-CORE

CFPO - 5 @ 20.0 MHz / SC Cut 3rd. Overtone Xtal.
No EFC option No reference / + 3.3 V power supply / package 36B
Operating range from -40°C to +85°C

Created on 2007 Jan.25
RoHS compliant Stratum 3^E OCXO

[Rakon's name & logo](#)

- 1./ Nominal frequency (Fo) **20.0 MHz**
Initial accuracy at delivery @ + 25°C / $\leq \pm 1.5 \times 10^{-6}$
- 2./ Supply voltage **+ 3.3 V \pm 5 %**
- 2.1- Power consumption during warm-up ≤ 3.5 W
under steady state at 25°C/calm air ≤ 1.5 W
- 3./ HCMOS compatible output signal into 15pF
- 3.1- Voh / Vol $> + 2.4$ V / $\leq + 0.4$ V
- 3.2- Duty cycle at 50% output signal **50 \pm 10 %**
- 3.3- Rise and fall-times (between 10% & 90%) < 5 ns
- 3.4- Phase noise in dBc / Hz (typical)
- | | |
|----------------|-------|
| @ 10 Hz | - 120 |
| @ 100 Hz | - 135 |
| @ 1 kHz & over | - 145 |
- 3.5- Sub-harmonics (dBc) $\leq - 30$
- 3.6- Spurious (dBc) $\leq - 30$

4./ Frequency stability versus operating conditions

- (after frequency recovery – see below graph)
- 4.1- over temperature (-40 to 85°C, calm air) $\leq \pm 1 \times 10^{-8}$
- 4.2- versus voltage variation (+3.3 V \pm 5%) $\leq \pm 2 \times 10^{-9}$
- 4.3- versus load change (1 to 2 loads) $\leq \pm 2 \times 10^{-9}$
- 4.4- Ageing per day (before shipment) $\leq \pm 3 \times 10^{-10}$
Drift 24 h with $\pm 5^\circ\text{C}$ variation $\leq \pm 3 \times 10^{-9}$
ageing over lifetime (20 years) $\leq \pm 1.0 \times 10^{-6}$
- 4.5- Short term (Allan Dev.1s steady state) $\leq \pm 5 \times 10^{-12}$
- 4.6- Warm-up time @ +25°C ≤ 5 mn

5./ Environmental conditions

- (not operating _ only for qualification)
- 5.1- Storage temperature range - 50°C to + 90°C
- 5.2- Shocks 50 g - 11 ms - 1/2 sine
IEC 68-2-27 _ Test Ea / Severity 50A
- 5.3- Vibration 10 g ; 10 - 500 Hz
IEC 68-2-06 Test Fc / Severity 500/10

6./ Identification / Marking

- (printed Label on cover top)
- Part Number
Nominal Frequency
Serial Number (6 digits)
Manufacturing Date code

RAKON
STP 2629 LF
20.0 MHz
L Nnnnn
Yy Ww

7./ Package type "36B" (metal solder-sealed package)

Pin out connections diameter = 0.80 \pm 0.05 mm

Outline in mm - Package 36B No EFC - No Reference

