

STP 2270 STRATUM 3E OCXO

ISSUE A ; 21 APRIL 2005

Description

- Miniature SC cut OCXO (CFPO-6 A2)

Package Outline 25

- 25.4 x 25.4 x 12.7mm

Nominal Frequency

- 12.8MHz
- Initial accuracy at delivery: @+25°C $\leq \pm 1.0 \times 10^{-6}$

Supply Voltage

- $\pm 3.3V \pm 5\%$
- Power consumption during warm up $\leq 3.5W$
- Under steady state @25°C / calm air $\leq 1.5W$

Warm Up Time

- @25°C within $\pm 1 \times 10^{-7}$ of final frequency with reference after 24 hours on: ≤ 5 min (typ.2 min)

Output Compatibility

- HCMOS output signal into 10kΩ // 15pF load
- Voh /Vol $> +2.4V / \leq +0.4V$
- Duty Cycle@ 50% output signal level 50±10%
- Rise and Fall times (between 10% & 90%) 5ns /15pF load

- Frequency Stability versus Operating conditions**
- Within operating temperature range 0 to 70°C : $\leq \pm 10 \times 10^{-9}$
 - Versus Supply Voltage 3.3V $\pm 5\%$: $\pm 5 \times 10^{-9}$
 - Versus Load Changes (from 1 to 2 HCMOS loads) : $\leq \pm 5 \times 10^{-9}$

Ageing

- per day (measured before shipment) : $\leq 1.0 \times 10^{-9}$
- per year (extrapolation after 30 days of operation) : $\leq \pm 1.5 \times 10^{-7}$
- over lifetime (extrapolation over 20 years): $\leq \pm 2.0 \times 10^{-6}$
- short term (Allan standard deviation 1s/ 100 samples): typical $\pm 1.0 \times 10^{-11}$

Phase Noise (Typical figures)

- 1Hz: -82dBc/Hz
- 10Hz: -112dBc/Hz
- 100Hz: -135dBc/Hz
- 1kHz: -145dBc/Hz
- 10kHz and beyond: -150dBc/Hz
- Spurious: -80dBc/Hz

Environmental Conditions (non-operating)

- Storage Temperature Range: -55 to 90°C
- Shocks 50g: 11ms - 1/2 sine IEC 68-2-27 Test Ea / Severity 50A
- Vibrations 10g: 10-500Mhz IEC 68-2-06 Test Fc / Severity 500/10

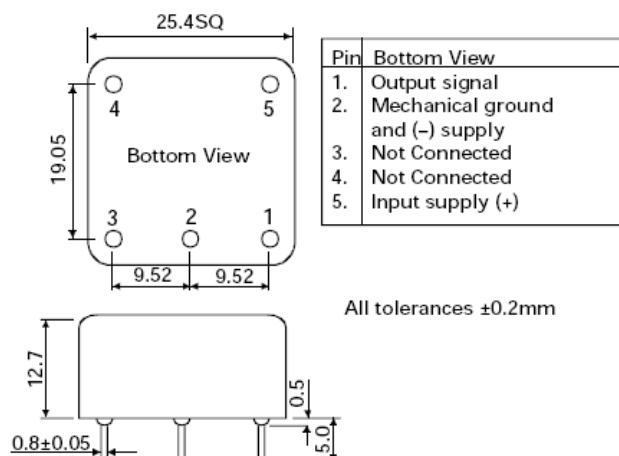
Documentation

- Table of results associated to prototypes (if ordered)
- Certificate of Conformance for Series production
- Measurement and data over a period of 2 years from shipment

Marking

- Manufacturer's Name: RAKON
- Part Number (for Series): STP 2270
- Nominal Frequency: 12.8MHz
- Serial Number (6 digits = 1 letter + 5 numerals)
- Manufacturing Date Code (4 digits = 2 for year + 2 for week)-YYWW

Outline in mm



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