44 avenue de la Glacière - BP 165
95105 ARGENTEUIL CEDEX - FRANCE

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OCXO SPECIFICATION	Reference	Page	1/3
	STP 3268 LF	Date	Visa
		2016 March 14th	Joseph Gouloumet & Philippe Bunel

RoHS 6/6 SMD OCXO / ROX-2522-S3 @ 10.0 MHz _ 3.3V SUPPLY
OPERABLE FROM -40°C UP TO +85°C _ 12.5 MM HIGH MAX
Compliant to STRATUM 3E per GR-1244-CORE

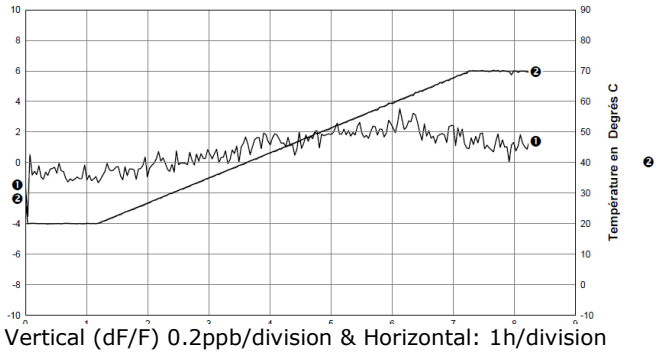
ARG NPE 2016-5876

1- Nominal frequency (Fo) : 10.0 MHz
Initial tolerance after shipment (after frequency recovery) : Fo ± 5E-7

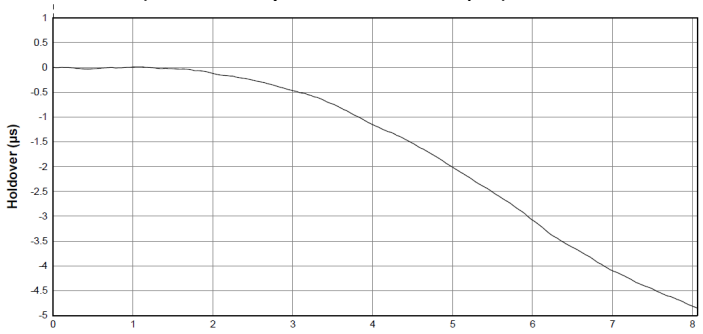
2-Power Supply Voltage supply : + 3.3 V ± 5 %
2.1- Power consumption @ warm-up time : ≤ 3.5 W
2.2- Current in steady state +25°C : ≤ 1.5 W

3- Output signal into 15pF load (rating up to 3 loads, Cl = 15 pF) : HCMOS compatible
3.1- Output levels Voh ≥ +2.4V / Vol ≤ +0.4 V
3.2- Duty cycle @ 50% output signal : 50 ± 10%
3.3- Rise - Fall times (from 10 to 90% output signal) :≤ 5 ns 15pF load)
3.4- Phase noise (in dBc/Hz) @ 1 Hz offset : - 95 typical
@ 10 Hz : - 125 typ.
@ 100 Hz : - 140 typ.
@ 1kHz : - 150 typ.
@ 10 kHz & over : - 155 typ.

4- Frequency stability over operating conditions – all causes inclusive,
Total free-run accuracy (Telcordia GR-1244 requirement: ± 4.6 ppm) : **≤ ± 1.5 E-6over lifetime**
after frequency recovery :
required time of continuous operation so as to re-stabilize the device after powered-off / storage period)
4.1-ageing – stability versus time (measured before shipment) : ≤ ± 3E-10 per day
Frequency drift based on extrapolation for 1 year / 20 years : ≤ ± 5E-8 / ≤ ± 5E-7
4.2- Drift 24 hours with ± 2.8°C (per Telcordia GR-1244) : ≤ ± 5E-10
4.3- Short term 1s integration time – 100 samples : 5 E-12 typical
4.4- Stability over operating temperature from **-10°C to +70°C** calm air : ≤ 1 E-9 peak to peak
over operable temperature from -40°C to +85°C : ≤ 2 E-9 peak to peak
4.5- versus power supply voltage (± 5%) : ≤ ± 5 E-10
4.6- Warm-up time @ +25°C to within ± 1E-7 of frequency reference : ≤ 5mn (2mn typ.)
(with frequency reference = frequency reached by the device after 24h on)
4.7- Holdover performance (with 50°C variation & gradient of 10°C/hour max) : ≤ 10µs / 8 hours



Vertical (dF/F) 0.2ppb/division & Horizontal: 1h/division



Vertical: 0.5µs/division & Horizontal: 1h/division

5- Environmental conditions (not operating – qualification)
5.1- Vibration 10g; 10- 500 Hz : IEC 68-2-6 test Fc severity 500/10
5.2- Shocks 50g – 11ms –1/2 sine : IEC 68–2-27 test Ea severity 50A
5.3- Storage temperature range : from - 50°C / + 90°C

6-Marking / Printed label on top of lid (possible to print Customer's Logo) **RAKON**
Part Number ("LF" means "RoHS") STP 3268 LF
Nominal Frequency 10.0 MHz
Serial Number (1 Letter + 5 Numerals) & Date-Code (4 Digits YyWw) SN: L Nnnnn DC: YyWw

Tape & Reel Packaging: compliant to standard EIA 481-3

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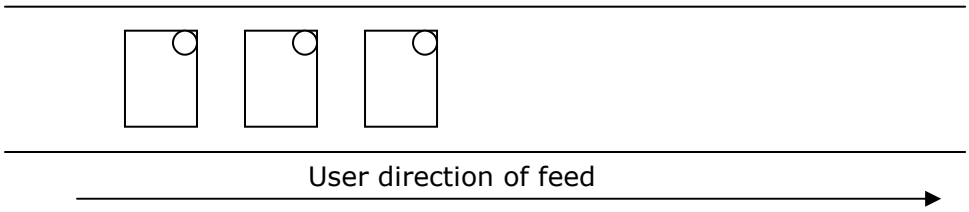
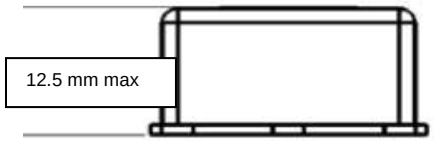
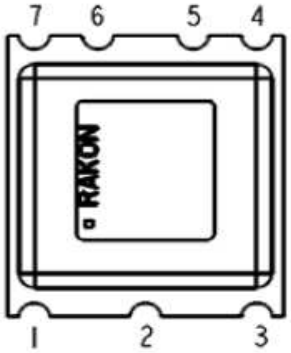
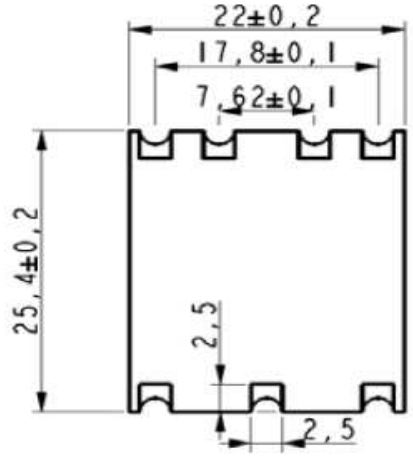


P1	W	Quantity per reel	Diameter
28	44	200	330 mm

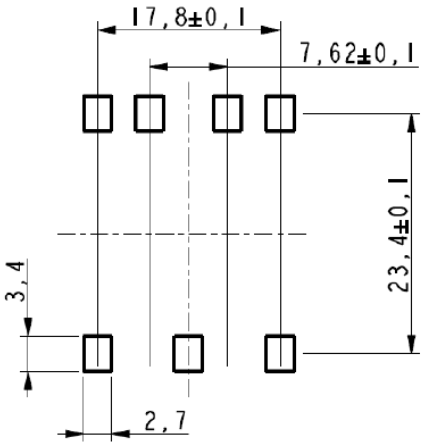




1	Not to be connected
2	Not to be connected
3	Supply voltage
4	RF Output signal
5	Not to be connected
6	Not to be connected
7	Ground (Mechanical & Supply)



PAD LAY OUT



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Outline Drawing (**maximum overall height of 12.5mm**)

Temperature Profile Feature	Pb-Free Assembly
Average Ramp-Up Rate (T_{Smax} to Tp)	3° C/second max.
Preheat – Temperature Min (T_{Smin}) – Temperature Max (T_{Smax}) – Time (t_{Smin} to t_{Smax})	 150 ℃ 200 ℃ 60-1 80 seconds
Time maintained above: – Temperature (T_L) – Time (t_L)	 217 ℃ 60-1 50 seconds
Peak/Classification Temperature (Tp)	245℃
Time within 5 ℃ of actual Peak Temperature(tp)	20-40 seconds
Ramp-Down Rate	6 ℃/second max.
Time 25 ℃ to Peak Temperature	8 minutes max.