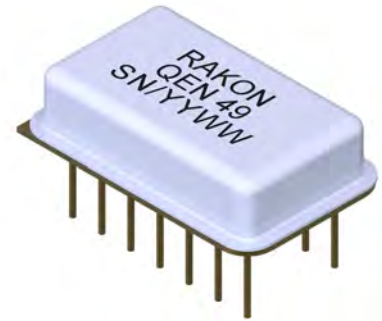


Specific request can be addressed to RAKON [info@rakon.fr](mailto:info@rakon.fr)

#### Product Description

This Crystal Oscillator is based on Hybrid Technology in DIL package. XO performs +/-50 to +/-100pm of overall frequency stability (vs. temperature range and calibration at 25°C, load and power supply changes) and ageing of +/- 5ppm per year. This reference is suitable for rugged radio systems used for instance in high speed trains or avionics.



#### Features

- Hybrid product with die and wire bonding to a ceramic substrate with 3 points crystal resonator.
- Case type (s) : DIL package 14 pin 20.7 x 13.1 x 5.1mm typical
- Frequency Range : 1.5MHz to 100MHz
- Temperature Range : from -40°C to +85°C up to -55°C to +125°C
- Overall Frequency Stability vs. Temperature Range and calibration at 25°C and load and power supply changes : +/-50 to +/-100pm overall
- Ageing per year: +/-5ppm at 85°C first year
- Output Wave Form : square ; Tristate output
- Supply Voltage : +3.3V or +5V
- Options available : R: duty cycle 50/50; T: tinned pins; Screening B



#### Applications

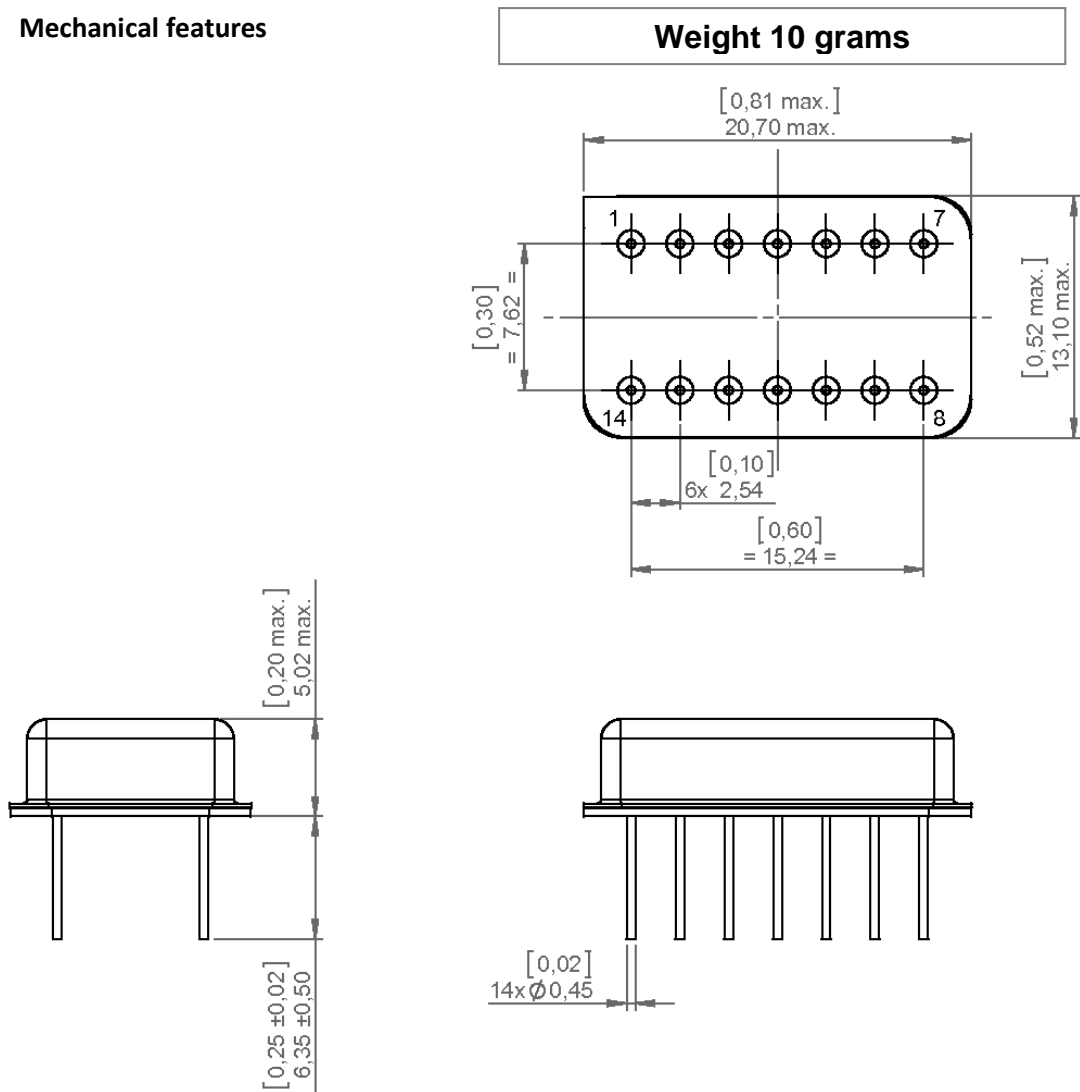
- Recommended for embedded applications, extended temperature range, and rugged environment.

#### Specifications

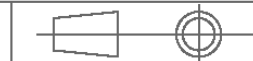
##### 1.0 Environmental conditions

Line	Parameter	Conditions/remarks	Min	Nom	Max	Unit
1.1	Operating Temperature	Temperature option DT	-40	25	85	°C
		Temperature option AY	-55	25	125	°C
1.2	Switch-on Temperature	TSo	-55		125	°C
1.3	Non-Operating Temperature	TNOp	-55		125	°C
1.4	Random Vibration	Level as per MIL-STD-202, Method 214, Condition I-F (20 Grms)				
1.5	Sine Vibration	Level as per MIL-STD-202, Method 204, Condition E (50G)				
1.6	Shocks	Mechanical shock as per MIL-STD-202, Method 213, cond A (half sine with a peak acceleration of 50g for duration of 11 msec				
1.7	Acceleration	Acceleration as per MIL-STD-883, Method 2001, condition A (5000g, during 60s in Y1)				

#### 4.0 Mechanical features



DOCUMENT : 150.Plan d'encombrement  
150-Oscillator outline



GEN. TOL.  
+/- 0.1

UNITS:  
mm [inch]

SCALE  
3:1

#### 5.0 Pin description

Line	Pin number	Name	Description
5.1	1		NC or Enable/disable or tristate
5.2	2 to 6	N.C.	
5.3	9 to 13	N.C.	
5.4	7	GND	Electrical & mechanical ground
5.5	8	Output	Output Frequency
5.6	14	Vcc	Power supply