

RHX3500

Rakon has been ESA-certified and a supplier of space qualified crystal resonators since 1979. Its high reliability crystal resonators are available over a wide temperature range and provide high stability in harsh mechanical environments. They are sealed under vacuum or neutral gas (nitrogen) in cold or resistance welding according to the applications.

Rakon's Space qualified crystals are manufactured in accordance with the European Space Agency's qualified PID (Process Identification Document). Furthermore, based on its quartz crystal competence, Rakon has also supplied for more than 20 years state of the art ultra stable oscillators of which the outstanding frequency stability is guaranteed by the use of Rakon's QAS (Self Suspended Quartz) crystal resonators inside.

Based on this long space heritage and experience of space qualified crystal resonators for very high performance oscillators, Rakon now offers crystal resonators fully manufactured and tested following the guidelines of MIL-PRF-3098.

Features

- AT, SC or IT cut
- Swept high quality crystal premium
- Low ageing (less than 1 ppm over 20 years)
- Low phase noise
- Low *g*-sensitivity

Applications

- Space
- Defense
- High reliability applications
- High reliability XOs, VCXOs, TCXOs and OCXOs

T807, HC-35 or TO-5



Frequency Specifications and Screening Test Options

Parameter		Min.	Typ.	Max.	Unit	Condition / Remarks
Frequency range:	Overtone 1	14		38	MHz	
	Overtone 3	20		110		
	Overtone 5	45		140		
Temperature range		-55		125	°C	
Ageing				1	ppm	Over 20 years
Screening	Group A	1500 <i>g</i> / 0.5 ms (100% tested)				
	Group B	46 <i>g</i> RMS from -55 to 125°C (samples of the same batch)				

Model Outline and Pin Connections

PIN CONNECTIONS

1	Crystal
3	Crystal
4	GND

NOTE: Outline unit is mm.