

AS9100 / ISO9001 Certified

Ultra Compact

The 270 Series DOCXO (Double Oven Controlled Crystal Oscillator) is one of the most compact double ovens in the industry. With a thermal stability of 2.0E-10, the 270 series double oven is a perfect replacement for your current atomic standard. The 270 series is also a perfect fit for standard European CO-08 footprints.



Key Features

- Ultra high stability
- SC-Cut crystal
- Low power consumption
- Excellent phase noise
- Hermetically sealed package
- Wide tuning range
- Fast warm-up
- Compact size

Applications

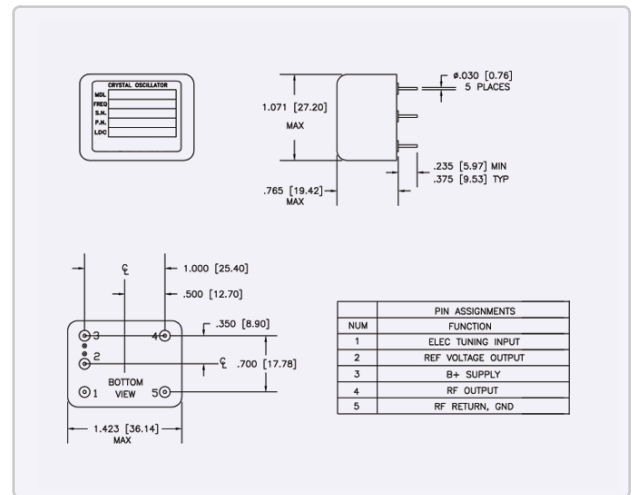
- Base Stations
- GPS Receivers
- Test Equipment
- Atomic Standard Replacement
- Stratum II and III+ Telephony

Typical Performance

Parameter	10 MHz	100 MHz	200 MHz
Temperature Range	-30 to +70°C	-30 to +70°C	-40 to +85°C
Thermal Stability	2.0E-10	2.0E-10	4.0E-09
Phase Noise (at 1Hz)	-105dBc/Hz	-97dBc/Hz	-85dBc/Hz
Phase Noise (at 100kHz)	-157dBc/Hz	-157dBc/Hz	-147dBc/Hz
Short Term Stability (1s)	5.0E-12	7.0E-12	1.0E-10
Short Term Stability (10s)	2.0E-11	3.0E-11	1.0E-10
Aging (per year)	1.0E-08	2.0E-08	2.0E-08
Warm-up Power	6.5W	6.5W	7.5W
Continuous Power (25°C)	1.7W	1.7W	1.8W

*RoHS compliant available

Interface Control Drawing



Performance Range

Parameter	Available Range
Frequency	5MHz to 60MHz
Thermal Stability	2.0E-10 to 5.0E-09
Operating Temperature	-40 to +75°C
Aging (per year)	1.0E-08 to 1.0E-07
Supply Voltage	3.3V to 15.0V
Supply Voltage Sensitivity	1.0E-10 to 2.0E-09
Output	Sine or CMOS
Harmonics	Down to -40dBc
Warm-up Time (25°C)	10 minutes
Warm-up Power	5.0W to 7.5W
Continuous Power (25°C)	1.2W to 1.8W
Tuning Range	±1.0E-06 to ±3.5E-06
Tuning Voltage	Up to ±10V

*Parameters can be modified to meet specific requirements