

# Rubidium Oscillator

## IQRB-2



## Key Features

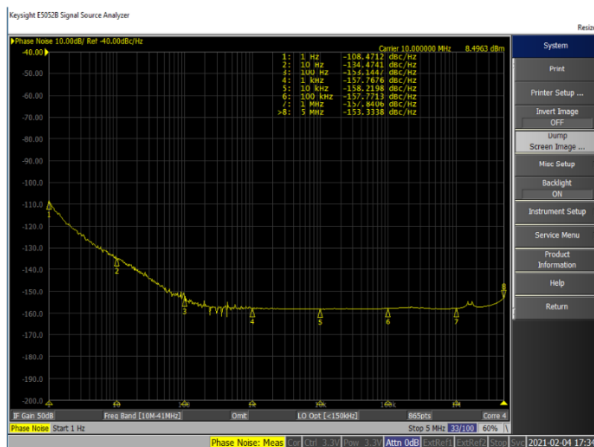
- Low phase noise:
  - 108 dBc/Hz @ 1 Hz
  - 158 dBc/Hz @ 10 kHz and below
- Excellent short term stability of  $7.5E-12$  typ @ Tau = 100 s
- Tight stability of  $\pm 0.3$  ppb typically over -20 to 60 °C

## IQRB-2 Rubidium Oscillator

The IQRB-2 is a low phase noise 12 V rubidium oscillator housed in a 101.2 x 60.7 x 37.7 mm package. The IQRB-2 offers a superb phase noise close to the IQRB-3 performance: a close in phase noise of -108 dBc/Hz @ 1 Hz and a noise floor of -158 dBc/Hz @ 10 kHz and below. With a short term stability of 7.5E-12 @ Tau = 100 s and an ageing performance of a maximum of 0.05 ppb per month, the IQRB-2 is still a perfect match for various time and frequency synchronisation applications.

### Specification

- 101.2 x 60.7 x 37.7 mm
- 10 MHz output
- ±0.3 ppb (typ) stability over -20 to 60 °C
- Typical short term stability (ADEV) of 7.5E-12 @ Tau = 100 s
- 12 V supply voltage
- Sine output

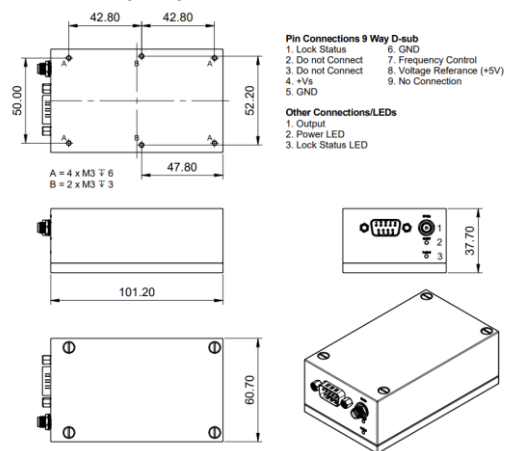


### Applications

Frequency and timing reference for:

- Broadcasting
- Financial data distribution
- Global Navigation Systems
- Industrial equipment
- Mobile base stations
- Reference signal for test and inspection equipment

### Outline (mm)



### Parts available:

Part Number	Supply Voltage	Package (mm)	Output Compatibility	Frequency	Short Term Stability @ 1 s	Operating Temperature Range
LFBRX0076289	12V	101.2 x 60.7 x 37.7	Sine	10 MHz	5.5E-11 @ Tau	-20 to 60 °C

### Additional material available:

#### Handbook

IQD has performed extensive testing and gathered the results into a comprehensive handbook. These include among others short-term stability, power consumption, phase noise and frequency over temperature measurements. Contact [info@iqdfrequencyproducts.com](mailto:info@iqdfrequencyproducts.com) for information.