

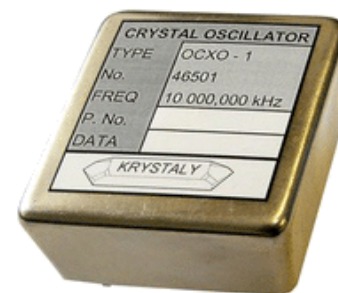
Oscillators OCXO

Typical application

An local oscillator everywhere it is necessary a need of an ultra high frequency stability and very low phase noise and low aging rates.

Features

The main characteristic of the Oven Controlled Crystal Oscillator (OCXO) is the extremely good frequency stability. The crystal and frequency determining oscillator elements are operated at the turn-over point of frequency- temperature (F&T) dependence, where the F&T has minimum. However the use of an oven requires an increased power consumption and a longer warm - up time.

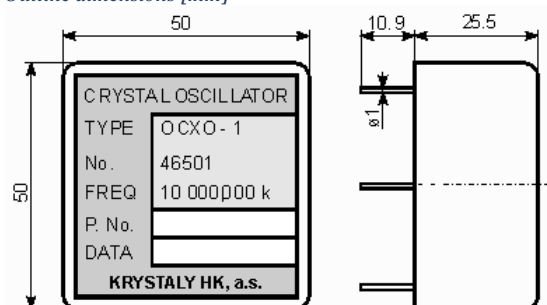


Typical specifications

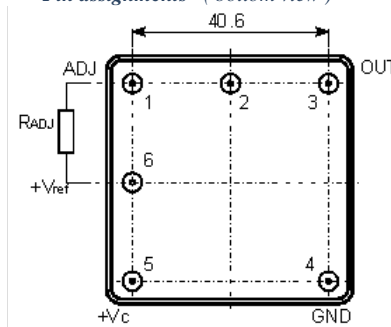
Type	OCXO-1
Frequency	10 000 kHz
Frequency stability: aging per year after 30 day	$< 7 \cdot 10^{-8}$
Frequency stability: short-term stability	$< 10^{-11}$
Frequency stability vs. temperature range 0°C ... +55°C	$< 10^{-8}$
Frequency stability vs. supply voltage	$< 5 \cdot 10^{-10} / V$
Frequency stability vs. Load change in 50 Ω	$< 10^{-9} / \Omega$
G - sensitivity	$< 2 \cdot 10^{-9} / g$
Supply voltage	12 - 15 V
Power at 25°C after turn-on	260 mA
Power at 25°C after 10 min	100 mA
Warm-up time with accuracy 10^{-8}	6 min.
Frequency adjustment with external resistance	$> \pm 10^{-6}$
Output level	$> 225 \text{ mV}_{\text{eff}}$
Output load	50 Ω
Output waveform	sinus

Differences from standard values and other parameters can be consulted.

Outline dimensions [mm]



Pin assignments (bottom view)



- 1 ADJ Adjustment +0.8 ... 8 V
with resistance R_{ADJ} : 1-900 kΩ
- 3 OUT Output frequency 10 MHz
- 4 GND Ground
- 5 +Vc Supply voltage +12 ... 15 V
- 6 +Vref Referency voltage +9 V