



Magic Xtal Ltd.

Only Magic Technologies!

Revised in March 2015

Low power high-strength high frequency miniature OCXO

Features MXO37H/14D

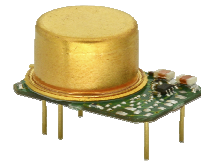
Very small sizes
 Ultra low power consumption: 0.23W at +25°C
 Very high mechanical strength: to up 500G, 1 ms shocks,
 Extended to 300 MHz frequency range (multiplication is used)
 Vibration 30G to 2000Hz sine
 Frequency stability to ± 20 ppb over -40°C to 85°C at 100 MHz
 Fast warming up: to 60s to 0.1ppm accuracy
 Operational frequency range: 30 – 300 MHz

Typical Applications

Portable and battery fed wireless
 Mobile test equipment
 Beacons & Rescue systems
 Equipment working at severe mechanical factors

14DIP compatible

MXO37H/14D

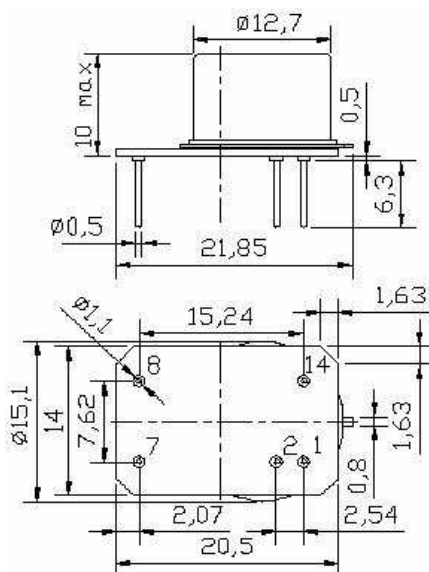


 RoHS compliant

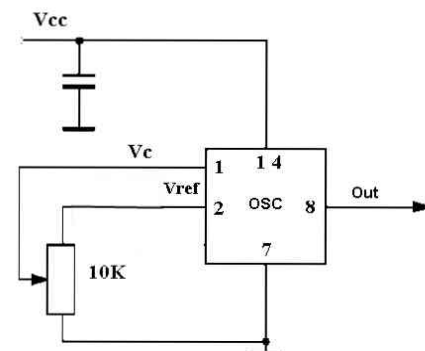
Description

The MXO37 series uses the internal heating resonator (IHR) technology with arrangement of the whole oven system together with the crystal plate inside the TO-8 vacuum holder. Such approach results in radical reduction of the OCXO sizes, power consumption and its warm-up time providing at that excellent temperature stability, low phase-noise and aging. The MXO37H/14D model utilizes essentially strengthened mechanical construction of the IHR enabling extraordinary mechanical durability. Usage of the internal multiplication of frequency (by 3 or 5) enables extension of the operational frequencies up to 300 MHz and improvement as compared to the MXO37 series of the temperature stability and aging rate in 30-150 MHz range.

Physical Dimensions



Pin Connections



Pin	Signal
1	Electrical tuning
2	Reference voltage
7	GND
8	RF Out
14	+V Supply

YOU ARE WELCOME TO CONTACT US: By E-mail:mxl@mxtal.com, website:www.mxtal.com.

Customers in China and HongKong please contract our distributor:ShangHai QiZhong Electronic Technology Co.,Ltd



Specification

Table with columns: OCXO Specification, Sym., Condition, Value (Min., Typ., Max.), Unit, Note. Rows include Operational Frequency Range, RF output (HCMOS/TTL compatible, Sine-wave option), Power supply, Frequency control*, Frequency stability, SSB Phase noise, Allan variance, Aging, and Environmental/mechanical conditions.

* No frequency control option – on customer requirement

Ordering code

MXO37H /14D E 17 C 5 S - 100 MHz

Table 1: Temperature range. Columns: Code, Specification. Rows: A (0°C..50°C), B (-10°C..60°C), C (0°C..70°C), D (-20°C..70°C), E (-30°C..70°C), F (-40°C..85°C), G (-55°C..85°C).

Table 2: Stability over temperature. Columns: Code, Specification, Temperature range code available for (100 MHz, 300 MHz). Rows: XZ, 59, 18, 28, 58, 17.

Table 3: Aging per day/year, ppb/ppm. Columns: Code, Specification. Rows: Z, C, D, E, F, G, H.

Table 4: Supply voltage. Columns: Code, Specification. Rows: 3, 5.

Table 5: Output. Columns: Code, Specification. Rows: T, S.

YOU ARE WELCOME TO CONTACT US: By E-mail:mxl@mxtal.com, website:www.mxtal.com.

Customers in China and HongKong please contract our distributor:ShangHai QiZhong Electronic Technology Co.,Ltd