

OCXO-200 NEW

Ovenized Crystal Oscillator

Microwave Dynamics' Ovenized Crystal Oscillators provide high stability (0.1 ppm) in the frequency range of 70 to 120 MHz.

Built to the same high standards as our Dielectric Resonator Oscillators, these OCXOs provide an excellent reference input complementing our DRO line.

These units feature high stability, fast warm-up, low power requirements, rugged military type housings and fast delivery.



General Specifications:

Output Frequency Range 70 MHz to 120 MHz
Output Level + 3 dBm into 50 ohms

Output Waveform Sine-wave Harmonic Distortion <-15 dbc Load 50 ohms

Input Supply Voltage $+ 12 \text{ VDC} \pm 10\%$ Input Power $+ 12 \text{ VDC} \pm 10\%$ < 800 mA 1st 3 sec< 230 mA next 60 sec

130 mA after warmup <1.5 minutes from + 25° C

for frequency accuracy to be within $\pm 1 \times 10^{-7}$ of prior frequency after 24 hours

off-time

Storage Temperature – 55°C to + 85°C

Operating Temperature:

Warm-up Time

Model Number	Temp Range (°C)	Stability (ppm)
OCXO-200K	+ 15° C to + 35° C	± 0.1
OCXO-200L	0° C to + 50° C	± 0.5
OCXO-200M	– 40° C to + 85° C	± 5

Part No OCXO-200y-xx.xxx

y = Temperature Range

x = Frequency

Microwave Dynamics

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Frequency Stability as a Function of:

Temperature $< \pm 0.5$ ppm over 0° C to

+ 50°C ambient

Input Voltage $< \pm 3x10^{-8}$ for a ± 10 %

change in input supply

Load $< \pm 1x10^{-8}$ for a $\pm 10 \%$

change in load

Time Domain Short-term 1 Second

<3x10-11

Aging Medium-term 24 hours

 $< \pm 1x10^{-9}$ after 72 hours

on-time Long-term

<5x10 -8 First Year <2x10 -8 Second Year <1.5x10 -8 Worst case



