

# 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 VDC $\pm$ 10%
Input Power	<800 mA 1st 3 sec <230 mA next 60 sec 130 mA after warmup
Warm-up Time	<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:

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

Part No **OCXO-200y-xx.xxx**

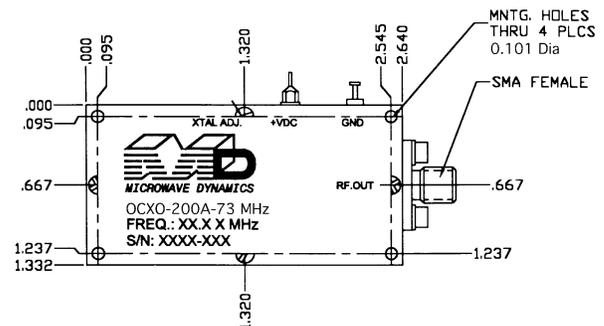
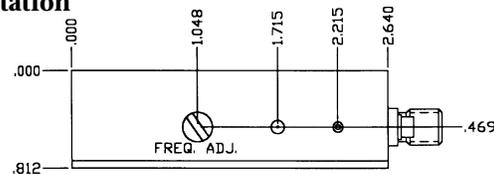
y = Temperature Range

x = Frequency

### Frequency Stability as a Function of:

Temperature	< $\pm 0.5$ ppm over 0° C to + 50° C ambient
Input Voltage	< $\pm 3 \times 10^{-8}$ for a $\pm 10$ % change in input supply
Load	< $\pm 1 \times 10^{-8}$ for a $\pm 10$ % change in load
Time Domain	Short-term 1 Second < $3 \times 10^{-11}$
Aging	Medium-term 24 hours < $\pm 1 \times 10^{-9}$ after 72 hours on-time Long-term < $5 \times 10^{-8}$ First Year < $2 \times 10^{-8}$ Second Year < $1.5 \times 10^{-8}$ Worst case

### Orientation



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