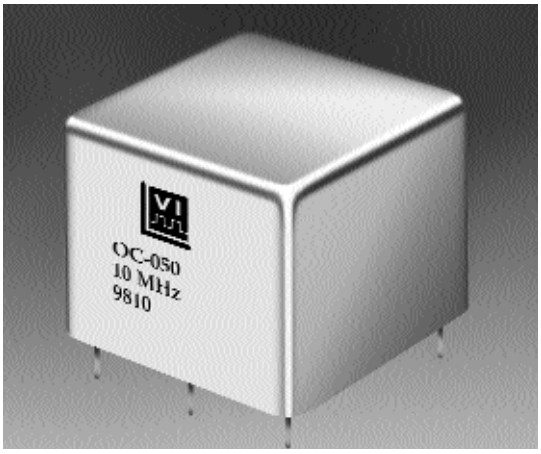
Oven Controlled Crystal Oscillators (OCXO's)

OC-050 Double Oven OCXO



Description:

The model OC-050 Double Oven series is available in frequencies of 5 MHz & 10 MHz standard with other frequencies available upon request. The model OC-050 provides exceptionally low aging rates, superior temperature stabilities and longer life performance than Rubidium oscillators at a fraction of the cost.

Features:

- **5 MHz & 10 MHz Standard Frequencies**
- **Temperature Stability: ±5x10^{-11} over 0°C to +50°C**
- **Aging: 1 x 10^{-10}/day standard**
- **Package: 2" x 2" x 1.4"**
- **Cost Effective Alternative to Rubidium**

Performance Characteristics

Parameter	Characteristics
Standard Frequencies:	5 MHz & 10 MHz (contact the factory for other frequencies)
Package Size:	50.80 x 50.80 x 35.56 mm (2" x 2" x 1.4")
Supply Voltage:	**A** = 15 Vdc ±5%, **B** = 12 Vdc ±5% <12W at turn on, <4W @+25°C (steady state)
Output:	**A** = HCMOS **J** = +7 dBm to +11 dBm / 50 ohm
Harmonics/Sub-Harmonics:	-40 dBc maximum (Sinewave output)
Temperature Stability:	**B-501** = ±5 x 10^{-11} over 0°C to +50°C **B-100** = ±1 x 10^{-10} **C-100** = ±1 x 10^{-10} over 0°C to +70°C **C-200** = ±2 x 10^{-10} **D-100** = ±1 x 10^{-10} over -20°C to +70°C **D-300** = ±3 x 10^{-10} **Other stability options are available- contact factory**
Aging (after 30 days on):	**A** = 1 x 10^{-10}/day average, 1.5 x 10^{-8}/year, 1 x 10^{-7} over 15 years **B** = 3 x 10^{-11}/day average, 5 x 10^{-9}/year, 5 x 10^{-8} over 15 years.
Short Term (Allan Deviation):	2x 10^{-12} for tau = 1 second, 2 x 10 $^{-12}$ for tau = 10 seconds
Phase Noise (Typical): With Sinewave output. Contact factory for improved noise options	**Offset** / **5 MHz** / **10 MHz** 10 Hz / -132 dBc/Hz / -126 dBc/Hz 100 Hz / -149 dBc/Hz / -141 dBc/Hz 1 kHz / -150 dBc/Hz / -143 dBc/Hz 10 kHz / -150 dBc/Hz / -143dBc/Hz 100 kHz / -150 dBc/Hz / -143 dBc/Hz
Frequency vs. Supply:	3 x 10^{-11} per percent
Frequency vs. Load:	1 x 10^{-11} per percent
Electrical Frequency Adjustment:	±2 x 10^{-7} minimum, ±4 x 10^{-7} maximum, for 0 to +10V control. Center frequency set at 5V ±0.5V. Positive transfer function. <±20% Linearity.
How to Order:	Contact factory for unique part number