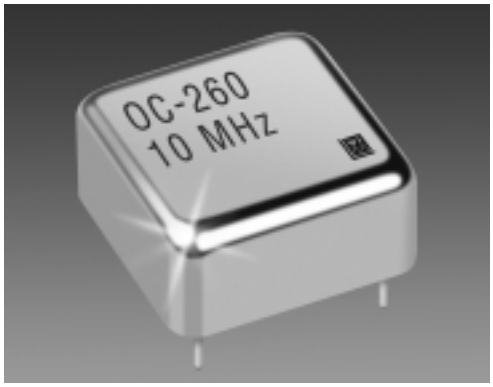
OC-260 Series (CO-760)



Description:

The OC-260 Series OCXO offers excellent temperature stability and aging in a 1" x 1" x 0.52" package.

Features:

- **Frequencies: 5, 10, 12.8, 13, 16.384, 19.44, 20, 20.48 MHz**
- **Stabilities: As low as ±1 x 10^{-8}**
- **Temperature Range: As wide as -40ºC to +85ºC**
- **Package: 1.0" x 1.0" x 0.52"**
- **Output: HCMOS, Sinewave**
- **Supply Voltage: 5 Volts or 3.3 Volts**

Performance Characteristics

Parameter	Characteristics
Standard Frequencies:	5.0, 10.0, 12.8, 13.0, 16.384, 19.44, 20.0, 20.48 MHz. Available from 1 to 80 MHz.
Package Size:	25.7 x 25.7x 13.2 mm (1.0" x 1.0" x 0.52")
Supply Voltage:	**C**=5 Vdc ±5% **D**=3.3 Vdc ±5% (HCMOS output only)
Input Power (steady state):	<1.5W @ +25ºC (-20°C / +70°C)
Input Power (turn-on):	<3W (-20°C/+70°C)
Output Type:	**A**: HCMOS **J**: Sinewave; +7 dBm into 50 ohm (+5V supply only)
Output Level:	5 V: "0" <0.5 V, "1" >4.5 V 3.3 V: "0" <0.3 V, "1" >3.0 V (HCMOS output)
Rise/Fall Time t_r/t_f:	<10 ns (10% - 90%, HCMOS)
Symmetry (Duty/Cycle):	50/50 ±10% (@50% Vdd, HCMOS)
Harmonics/subs:	-20 dBc (for sinewave output)
Temperature Stability:	**B-208**: ±2 x 10^{-8} over 0/50°C **B-107**: ±1 x 10^{-7} over 0/50°C **D-408**: ±4 x 10^{-8} over -20/70°C **D-107**: ±1 x 10^{-7} over -20/70°C **F-107**: ±1 x 10^{-7} over -40/85°C **F-207**: ±2 x 10^{-7} over -40/85°C Note: Tighter stability options are available - contact factory.
Aging:	**A**: 1 x 10^{-8}/day, 2x10^{-6}/year **C**: 1 x 10^{-9}/day, 3x10^{-7}/year **B**: 3 x 10^{-9}/day, 1x10^{-6}/year
Short Term Stability (Allan Deviation):	5 x 10^{-11}/second (with aging **A** or **B**) 1 x 10^{-11}/second (with aging **C**)
Phase Noise: (typical @ 10 MHz)	-110 dBc/Hz @ 10 Hz -150 dBc/Hz @ 10 kHz -130 dBc/Hz @ 100 Hz -150 dBc/Hz @ 50 kHz -145 dBc/Hz @ 1 kHz
Frequency vs. Supply:	5 x 10^{-9}/percent (with Aging **A** or **B**); 2 x 10^{-9}/percent (with Aging **C**)
Electrical Frequency Adjust:	10 x 10^{-6} typical range (with Aging **A** or **B**) 2 x 10^{-6} typical range (with Aging **C**)
Mechanical Configuration:	Pins for PCB mounting

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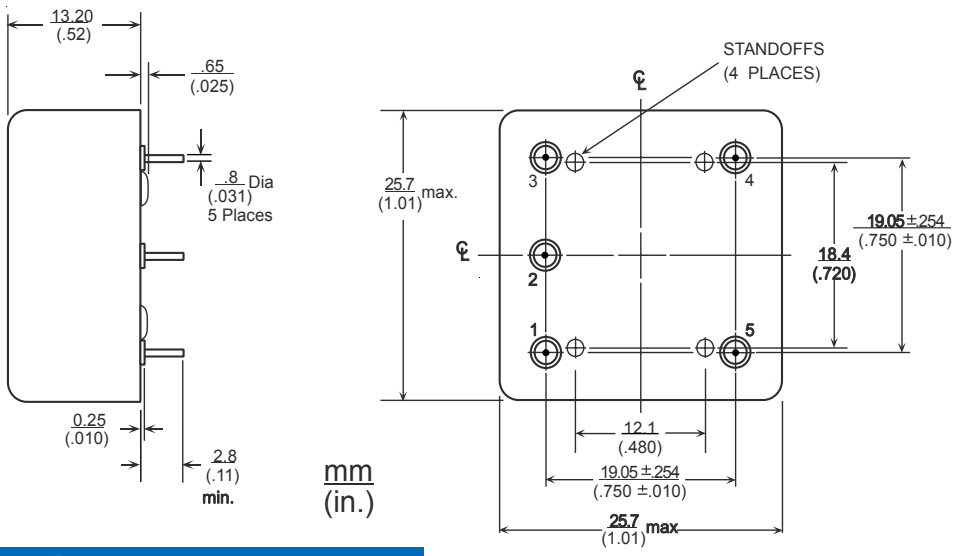
Outline Drawing



Pin Out Information

Pin	Function
1	Output
2	GND, Case
3	Electrical Frequency Adjustment Input or N/C*
4	N/C or Reference Voltage Output*
5	Supply Voltage
	Pin numbers are for reference only, and may not appear on unit.

Ordering Information

OC – 260 – C A D – 107 C A – 20 MHz

Product Family
OC = OCXO

Package
260 = 25.7x25.7 mm
Thru-hole

Supply Voltage
C = 5.0V ±5%
D = 3.3V ±5%

Output
A = HCMOS (100K // 10 pF Load)
J = Sinewave +7 dBm/50 ohm
(5.0V supply only)

Temperature Stability*
B-107 = ±1x10^{-7} over 0°C to +50°C
B-208 = ±2x10^{-8} over 0°C to +50°C
D-107 = ±1x10^{-7} over -20°C to +70°C
D-408 = ±4x10^{-8} over -20°C to +70°C
F-207 = ±2x10^{-7} over -40°C to +85°C
F-107 = ±1x10^{-7} over -40°C to +85°C
*Other stability options are available upon request

Aging
A = 1 x 10^{-8}/day, 2 x 10^{-6}/year
B = 3 x 10^{-9}/day, 1 x 10^{-6}/year
C = 1 x 10^{-9}/day, 3 x 10^{-7}/year

Electrical Frequency Adjust
10 x 10^{-6} typical range (with Aging **A** or **B**)
2 x 10^{-6} typical range (with Aging **C**)

Frequency
1 - 80 MHz