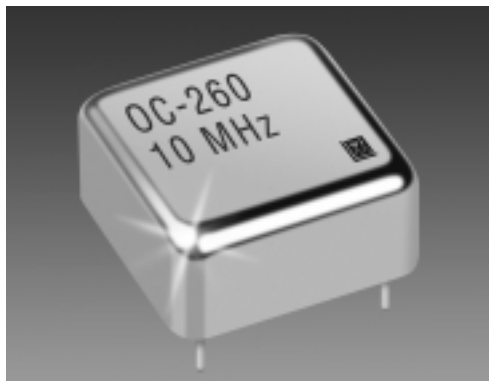


Oven Controlled Crystal Oscillators (OCXO's)

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 $\pm 1 \times 10^{-8}$
- Temperature Range: As wide as -40°C to $+85^{\circ}\text{C}$
- Package: 1.0" x 1.0" x 0.52"
- Output: HCMOS, Sinewave
- Supply Voltage: 5 Volts or 3.3 Volts

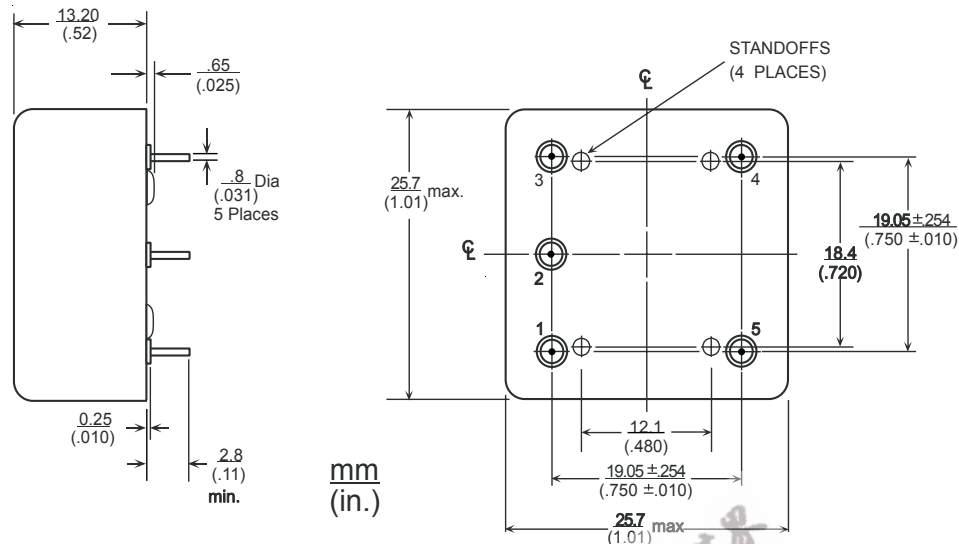
Performance Characteristics

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 25.7 x 13.2 mm (1.0" x 1.0" x 0.52")
Supply Voltage:	C =5 Vdc $\pm 5\%$ D =3.3 Vdc $\pm 5\%$ (HCMOS output only)
Input Power (steady state):	<1.5W @ $+25^{\circ}\text{C}$ (-20°C / $+70^{\circ}\text{C}$)
Input Power (turn-on):	<3W ($-20^{\circ}\text{C}/+70^{\circ}\text{C}$)
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 $\pm 10\%$ (@50% Vdd, HCMOS)
Harmonics/subs:	-20 dBc (for sinewave output)
Temperature Stability:	B-208 : $\pm 2 \times 10^{-8}$ over 0/50°C B-107 : $\pm 1 \times 10^{-7}$ over 0/50°C D-408 : $\pm 4 \times 10^{-8}$ over -20/70°C D-107 : $\pm 1 \times 10^{-7}$ over -20/70°C F-107 : $\pm 1 \times 10^{-7}$ over -40/85°C F-207 : $\pm 2 \times 10^{-7}$ over -40/85°C Note: Tighter stability options are available - contact factory.
Aging:	A : 1×10^{-8} /day, 2×10^{-6} /year C : 1×10^{-9} /day, 3×10^{-7} /year B : 3×10^{-9} /day, 1×10^{-6} /year
Short Term Stability (Allan Deviation):	5×10^{-11} /second (with aging A or B) 1×10^{-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:	5×10^{-9} /percent (with Aging A or B); 2×10^{-9} /percent (with Aging C)
Electrical Frequency Adjust:	10×10^{-6} typical range (with Aging A or B) 2×10^{-6} typical range (with Aging C)
Mechanical Configuration:	Pins for PCB mounting

Oven Controlled Crystal Oscillators (OCXO's)

OC-260 Series (CO-760)

Outline Drawing



OCXO

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.	

* custom part number to be assigned

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)

Frequency
1 - 80 MHz

Electrical Frequency Adjust
10 x 10⁻⁶ typical range (with Aging A or B)
2 x 10⁻⁶ typical range (with Aging C)

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

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