



OSCILLATORS

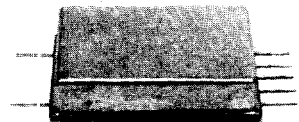
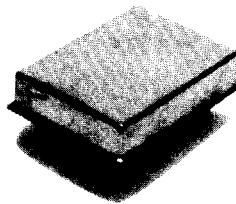
TCXO -- Model XO3080 Series

Features:

- **Very small size (0.98" x 0.69" x 0.22")**
- **Very low profile**
 - **Surface or through-hole mounted**
 - **Low power**
 - **High stability**
 - **Ruggedized design**
 - **Sine or logic output**
 - **VCXO version available**

Applications:

Portable communication systems, GPS receivers, and where very small size and low power are needed.



Specifications -- XO3080 Series

	Standard	Options
Frequencies	20.0, 25.5, 43.796, 46.72, 48.0, 75.0 MHz	10 to 100 MHz
Aging Per Year	Dependent on frequency, as low as 0.5 ppm/yr	
SSB Phase Noise (dBc):	Frequency dependent as low as -90 dBc at > 10 Hz offset -150 dBc at > 10 kHz offset	
Power Supply: Oscillator voltage Oscillator current	5 V ± 0.25 V 3 mA	5 V to 15 V (Sinewave version)
Frequency Adjustment: Method Range	Ext. 10 K pot ± 5 ppm for aging	Ext. voltage or VCXO to ± 30 ppm/V
Output Signal: Type Level Load	Sinewave 1.5 V pk-pk 1 Kohms//10 pF	CMOS -3 to +3 dBm in 50 Ω
Environmental: Vibration Shock	0.4 g ² /Hz, 100-2000 Hz 50 g 11 mS ½ sine	Consult factory

This series of oscillators is **not** designed to withstand IR/convection or vapor phase solder reflow. The surface mount version should be attached using a hand held soldering iron. The through-hole version may be attached by hand or by wave soldering .

This series of oscillators is available in surface mount or through-hole mounting. The output type can be sinewave or CMOS logic.

	Surface Mount	Through-hole
Sinewave	XO3080	XO3081
CMOS logic	XO3082	XO3083

Optional Temperature Ranges and Frequency Stabilities

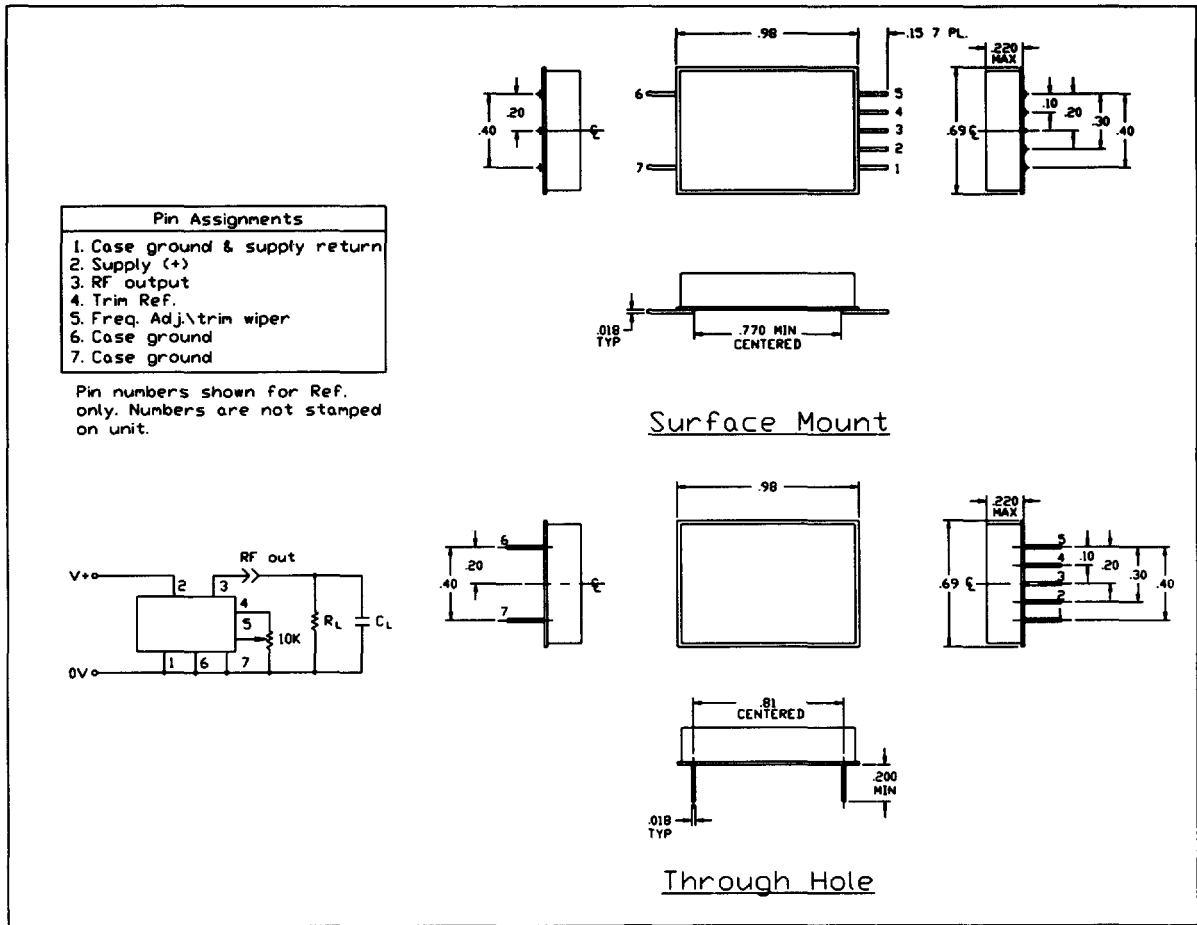
Temperature Range (°C)	Frequency/Temperature Stability (ppm)						
	± 5	± 3	± 2	± 1	±0.75	±0.50	±0.25
+15 to +30	X	X	X	X	X	X	X
0 to +50	X	X	X	X	X	X	X
0 to +70	X	X	X	X	X	X	
-20 to +70	X	X	X	X	X		
-40 to +75	X	X	X	X			
-55 to +85	X	X	X	X			

This TCXO can be produced to these specifications, with extended temperature range and tighter stability being cost drivers.

XO3080-001 -- Standard Version Preferred

Frequency	20 MHz
Temperature Range	-30 to +70°C
Temperature Stability	± 0.75 ppm
Aging Per Year	± 1 ppm max.
SSB Phase Noise (dBc) at:	
10 Hz	-85
100 Hz	-115
1000 Hz	-135
10000 Hz	-145
Power Supply: Oscillator voltage	5 V ± 0.25 V
Oscillator current	2 mA
Frequency Adjustment: Method	Ext. 10 k Pot
Range	± 5 ppm
Output Signal: Type	Sinewave
Level	2.0 V pk-pk
Load	1 Kohms//10 pF
Environmental: Vibration	0.4 g ² /Hz, 100-2000 Hz
Shock	50 g 11 ms ½ sine

Outline Drawings -- XO3080 Series



VCXO Connection

Specifications subject to change without notice.

