



OSCILLATORS

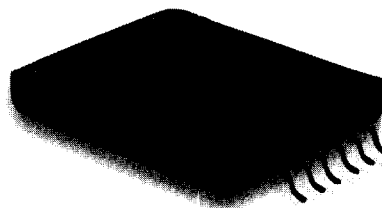
TCXO -- Model XO3022

Features:

- Small size (1.25" x 1.00" x 0.20")
- Very low profile
- Surface mounted
- Low power
- High stability
- Ruggedized design
- VCXO version available

Applications:

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



Specifications -- XO3022 Series

	Standard	Options
Frequencies	20.0, 25.5, 43.796, 46.72, 48.0, 75.0 MHz	10 to 75 MHz
Aging Per Year	Dependent on frequency, as low as 0.5 ppm/yr	
SSB Phase Noise (dBc):	Frequency dependent as low as -80 dBc at > 10 Hz offset -150 dBc at > 10 kHz offset	
Power Supply: Oscillator voltage Oscillator current	5 V $\pm$ 0.25 V 3 mA	5 V to 15 V
Frequency Adjustment: Method Range	Ext. 10K pot $\pm$ 5 ppm for aging	Ext. voltage or VCXO to $\pm$ 30 ppm/V
Output Signal: Type Level Load	Sinewave 0.5 V pk-pk 1 Kohms	-3 dBm to +3 dBm into 50 ohms
Environmental: Vibration Shock	0.4 g ² /Hz, 100-2000 Hz 50 g 11 ms $\frac{1}{2}$ sine	Consult factory

Optional Temperature Ranges and Frequency Stabilities

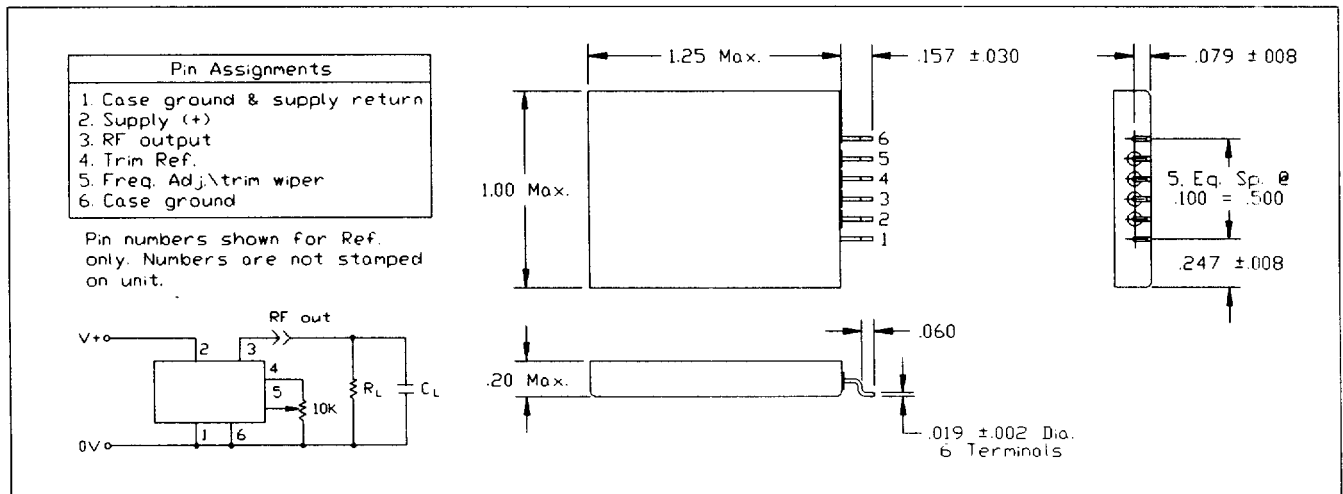
Temperature Range (°C)	Frequency/Temperature Stability (ppm)						
	$\pm$ 5	$\pm$ 3	$\pm$ 2	$\pm$ 1	$\pm$ 0.75	$\pm$ 0.50	$\pm$ 0.25
+15 to +30	X	X	X	X	X	X	X
0 to +50	X	X	X	X	X	X	X
0 to +70	X	X	X	X	X	X	
-20 to +70	X	X	X	X	X		
-40 to +75	X	X	X	X			
-55 to +85	X	X	X	X			

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

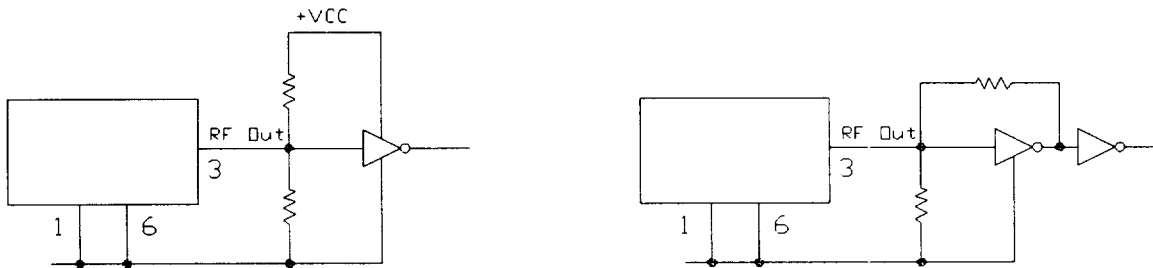
XO3022-009 -- Standard Version in Stock

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 100 Hz 1000 Hz 10000 Hz	-85 -115 -135 -145
Power Supply: Oscillator voltage Oscillator current	5 V ± 0.25 V 2 mA
Frequency Adjustment: Method Range	Ext. 10K Pot ± 5 ppm
Output Signal: Type Level Load	Sinewave 2.0 V pk-pk 1 Kohms//10pF
Environmental: Vibration Shock	0.4 g ² /Hz., 100-2000 Hz 50 g 11 mS ½ sine

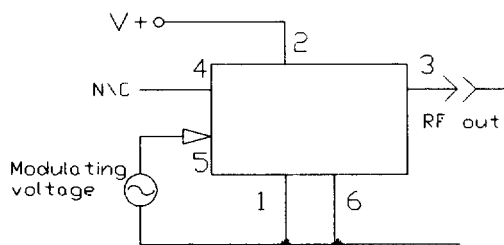
Outline Drawing -- XO3022 Series



Alternate Connections



Output Biased to Drive a Gate



VCXO Connections

Specifications subject to change without notice.