XO5163 Series
14 pin DIP, 12.0 Volt, Sinewave, OCXO

- **Standard DIP/DIL package (20.3 x 13.2 x 7.6 mm) offering tight stabilities, fast warm-up, and low current**
- **Ideal for PCS base stations, cellular base stations, phase locking, and SAR/SAT applications**

Ordering Information

XO5163 A R1 -R 00.0000 MHz

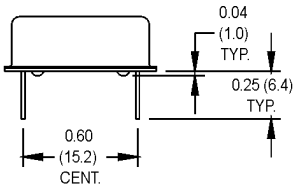
Product Series

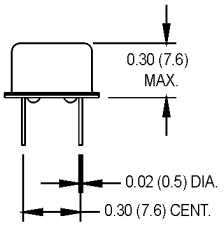
Stability/Temperature
- **A:** ±0.05 ppm, 0°C to +60°C
- **B:** ±0.10 ppm, -20°C to +70°C
- **C:** ±0.20 ppm, -40°C to +85°C

Frequency Adjustment Method:
- **R1:** External Resistor Adjust (See Figure 1)
- **V5:** Voltage Adjust (See Figure 2)

RoHS Compliance
- **Blank:** non-RoHS compliant part
- **-R:** RoHS compliant part

Frequency (Customer Specified)





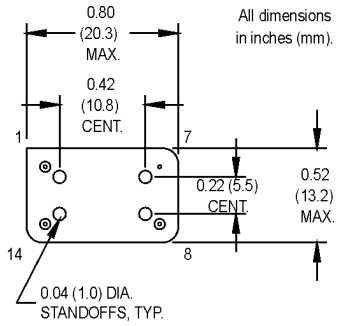


Figure 1

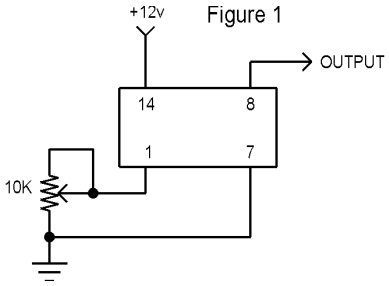
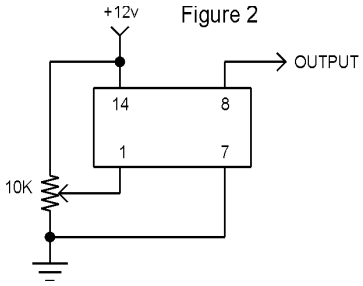


Figure 2



Pin Connections

PIN	FUNCTION
1	Frequency Adjust
7	Case ground & supply return
8	R.F. Output
14	Supply (+)

	PARAMETER	Symbol	Min.	Max.	Units	Condition
Electrical Specifications	Frequency Range	F	10	20	MHz	
	Operating Temperature	TA	(See Ordering Information)		°C	
	Stability Over Temperature	ΔF/F	(See Ordering Information)		ppm	
	Short Term Stability			5 x 10^{-11}		0.1 to 30 secs.
	Aging (First Year)			±0.7	ppm	
	Aging (10 Years)			±4.0	ppm	
	Frequency Vs. Supply			±0.1	ppm	
	Frequency Vs. Load			±0.01	ppm	
	Supply Voltage	Vcc	+11.5	+12.5	Volts	
	Warm-Up Time		To spec after 30 secs.			0°C
	Warm-Up Current			250	mA	After 10 secs.
	Supply Current	Icc		25	mA	+30°C
				40	mA	-20°C
	Output Signal		Sinewave			
	Output Level		1	2	V pk-pk	
	Harmonics		-10		dBc	
	Spurious Modes		-70		dBc	
	Output Load			1K ‖ 10 pF		+10%
	Frequency Adjustment (Pin 1)		±4		ppm	See Figure 1 or 2
	Tuning Slope		Positive			
	Input Impedance (Pin 1)		4.7K		ohms	
	Phase Noise					(BW = 1 Hz)
	1 Hz			-60	dBc/Hz	Offset from carrier
	10 Hz			-90	dBc/Hz	
	100 Hz			-120	dBc/Hz	
	1 kHz			-130	dBc/Hz	
Environmental	Mechanical Shock	2000 g, 0.3 mS, 1/2 sine				
	Vibration	2000 Hz, 10 g				
	Storage Temperature	-55°C to +125°C				
	Hermeticity	Per MIL-STD-202, Method 112				
	Solderability	EIAJ-STD-002				