

## XO5160 Series

14 pin DIP, 5.0 Volt, HCMOS/TTL, OCXO



- Standard DIP/DIL package offering tight stabilities, fast warm-up, and low current
- Ideal for PCS base stations, cellular base stations, phase locking, and SAR/SAT applications

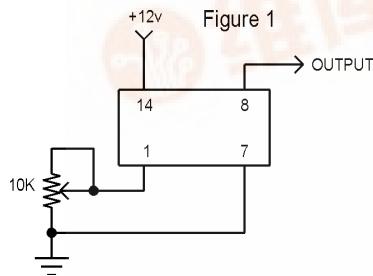


Figure 1

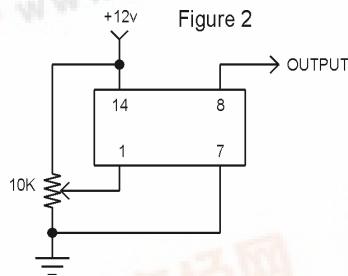
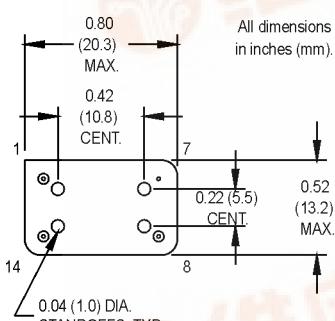
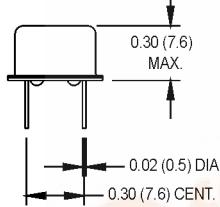
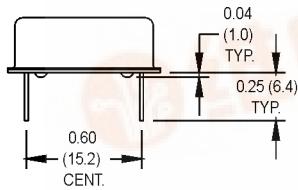


Figure 2



All dimensions in inches (mm).

Electrical Specifications					
PARAMETER	Symbol	Min.	Max.	Units	Condition
Frequency Range	F	10	20	MHz	
Operating Temperature	T <sub>A</sub>	(See Ordering Information)		°C	
Stability Over Temperature	ΔF/F	(See Ordering Information)		ppm	
Short Term Stability			5 x 10 <sup>-11</sup>		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	V <sub>cc</sub>	+4.8	+5.2	Volts	
Warm-Up Time		To spec	after 30 secs.		0°C
Warm-Up Current			250	mA	After 10 secs.
Supply Current	I <sub>cc</sub>		70	mA	+30°C
			110	mA	-20°C
Output Signal					HCMOS/TTL Compatible
Rise/Fall Time	Tr/Tf		7	ns	Ref. 10% and 90%
Logic "0" Level	V <sub>ol</sub>		0.4	Volts	
Logic "1" Level	V <sub>oh</sub>	V <sub>cc</sub> - 0.5		Volts	
Symmetry	Sym		40/60	%	Ref. To 1/2 V <sub>cc</sub>
Output Load			15 pf HCMOS 10 LS TTL		
Frequency Adjustment (Pin 1)		±4		ppm	See Figure 1 or 2
Tuning Slope			Positive		
Input Impedance (Pin 1)		4.7K		ohms	
Phase Noise					
1 Hz			-70	dBc/Hz	(BW = 1 Hz)
10 Hz			-100	dBc/Hz	Offset from carrier
100 Hz			-130	dBc/Hz	
1 kHz			-140	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			