## **XO5160 Series**

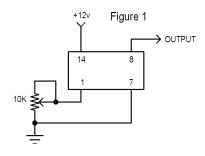
## 14 pin DIP, 5.0 Volt, HCMOS/TTL, OCXO

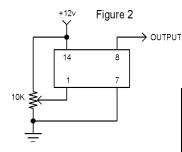


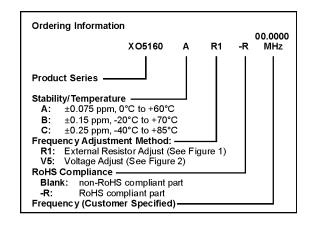




- Standard DIP/DIL package offering tight stabilities, fast warm-up, and low current
- Ideal for PCS base stations, cellular base stations, phase locking, and SAR/SAT applications

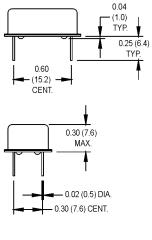


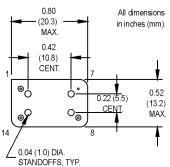




## **Pin Connections**

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	∆ <b>F/F</b>	(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	Vcc	+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	lcc		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	Vol		0.4	Volts	
	Logic "1" Level	Voh	Vcc - 0.5		Volts	
	Symmetry	Sym		40/60	%	Ref. To 1/2 Vcc
	Output Load			15 pf HCMOS		
				10 LS TTL		
	Frequency Adjustment (Pin 1)		± <b>4</b>		ppm	See Figure 1 or 2
	Tuning Slope		Positive			
	Input Impedance (Pin 1)		4.7K		ohms	
	Phase Noise					(BW = 1 Hz)
	1 Hz			-70	dBc/Hz	Offset from carrier
	10 Hz			-100	dBc/Hz	
	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						

MtronPTI reserves the right to make changes to the product(s) and service(s) described herein without notice. No liability is assumed as a result of their use or application.