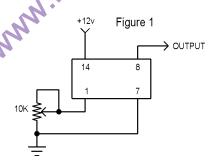
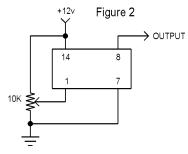
## MXO5161 Series 12,0 Volt HCMOS/TTL Compatible OCXO (20.3 x 13.2 x 7.6 mm)

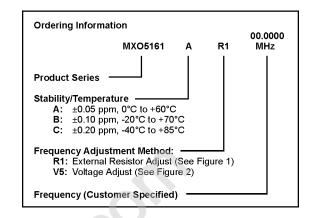


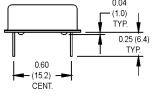


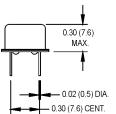
- Standard DIP/DIL package offering tight stabilities, fast warm-up, and low current
- Ideal for PCS base stations, cellular base stations, phase locking, and SAR/SAT applications
- 12V Operation

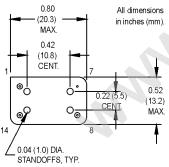












0.80 — (20.3) MAX.	-		dimensions ches (mm).
0.42 (10.8) CENT.	-	- 7	
) P		0.22 (5.5) CENT	0.52 (13.2) MAX.
04 (1.0) DIA ANDOFFS		8	1

## **Pin Connections**

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

	PARAMETER	Symbol	Min.	Max.	Units	Condition		
	Frequency Range	F	10	20	MHz			
	Operating Temperature	TA	(See Ordering Information)		°C			
	Stability Over Temperature	∆F/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	Vcc	+11.5	+12.5	Volts			
Electrical Specifications	Warm-Up Time		To spec after 30 secs.			0°C		
	Warm-Up Current			250	mA	After 10 secs.		
	Supply Current	lcc		25	mA	+30°C		
				40	mA	-20°C		
Spe	Output Signal		HCMOS/T	TL Compatible				
Electrical 9	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)		±4		ppm	See Figure 1 or 2		
	Tuning Slope		F	ositive		6		
	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	0,0		
	100 Hz			-120	dBc/Hz			
	1 kHz			-130	dBc/Hz			
<u> </u>	Mechanical Shock	2000 g, 0	2000 g, 0.3 mS, 1/2 sine					
Je II	Vibration	2000 Hz, 10 g						
Environmental	Storage Temperature	-55°C to +125°C						
<u>×</u> ir	Hermeticity	Per MIL-STD-202, Method 112						
ᇤ	Solderability	ability EIAJ-STD-002						
	-							

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11/25/02