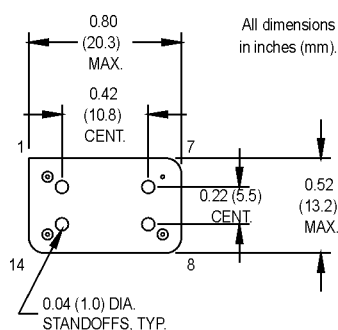
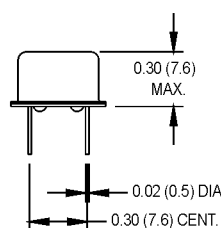
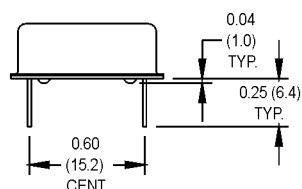
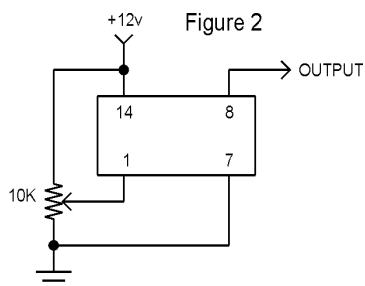
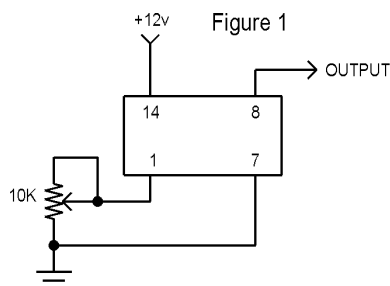


MXO5161 Series 12.0 Volt HCMOS/TTL Compatible OCXO (20.3 x 13.2 x 7.6 mm)



- 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

Ordering Information			
	MXO5161	A	R1 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)		
Frequency (Customer Specified)			



Pin Connections

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

Electrical Specifications	PARAMETER	Symbol	Min.	Max.	Units	Condition
	Frequency Range	F	10	20	MHz	
	Operating Temperature	T _A	(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	V _{cc}	+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	I _{cc}		25	mA	+30°C
				40	mA	-20°C
	Output Signal		HCMOS/TTL Compatible			
	Rise/Fall Time	Tr/Tf		7	ns	Ref. 10% and 90%
	Logic "0" Level	V _{ol}		0.4	Volts	
	Logic "1" Level	V _{oh}	V _{cc} - 0.5		Volts	
	Symmetry	Sym		40/60	%	Ref. To 1/2 V _{cc}
	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					(BW = 1 Hz) Offset from carrier
	1 Hz			-60	dBc/Hz	
	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				

M-tron 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. No rights under any patent accompany the sale of such product.

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