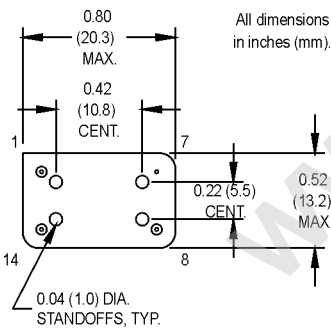
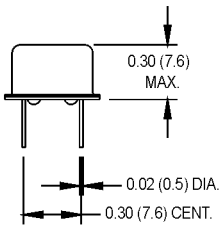
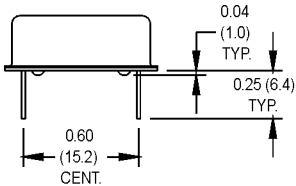
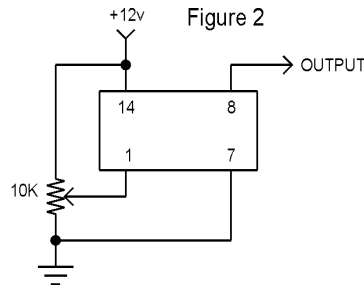
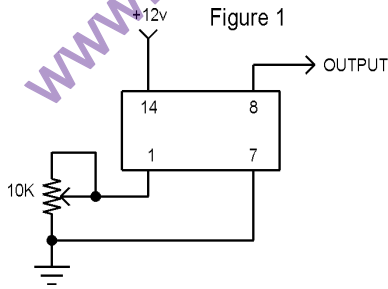


MXO5163 Series 12.0 Volt Sinewave Output OCXO (20.3 x 13.2 x 7.6 mm)



- 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			
	MXO5163	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 (+)

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		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) Offset from carrier
1 Hz			-60	dBc/Hz	
10 Hz			-90	dBc/Hz	
100 Hz			-120	dBc/Hz	
1 kHz			-130	dBc/Hz	
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.

M-tron Industries, Inc., PO Box 630, Yankton, SD 57078-0630, USA Phone: 605-665-9321 or 1-800-762-8800 Fax: 605-665-1709 Website: www.mtron.com
M-tron Industries Limited, 1104 Shanghai Industrial Investment Building, 48-62 Hennessy Road, Wanchai, Hong Kong, China Phone: 852-2866-8023 Fax: 852-2529-1822