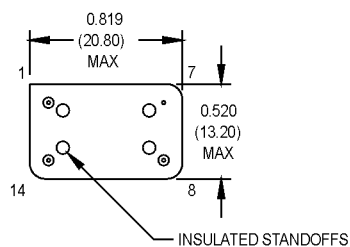
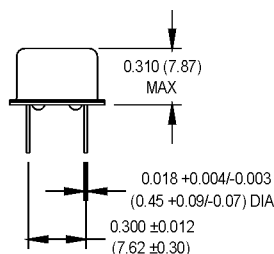
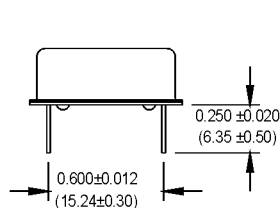


MTXO Series

14 DIP, 5.0 Volt, HCMOS/TTL, TCXO



- Stable TCXO to +/- 1ppm
- Reference timing for SONET, ATM, Instrumentation, and Military Applications



All dimensions
in inches (mm).

Ordering Information

	MTXO	1	H	V	A	D	00.0000 MHz
Product Series							
Temperature Range							
1: 0°C to +70°C							
2: -40°C to +85°C							
6: -20°C to +70°C							
8: 0°C to +50°C							
Stability							
E: ±10 ppm							
L: ±5 ppm							
H: ±2.5 ppm							
K: ±2 ppm							
J: ±1 ppm							
Frequency Control (Pin #1)							
F: Fixed ("H", "L", and "E" stabilities only)							
V: ±5 ppm Min. For 0 VDC to 5.0 VDC							
Symmetry/Logic Compatibility							
A: 40/60 CMOS/TTL							
B: 45/55 TTL (< 100.000 MHz only)							
C: 45/55 CMOS							
T: True Sinewave Output							
Package/Lead Configurations							
D: DIP; Nickel Header							
S: Surf Board							
Frequency (customer specified)							

	Electrical Specifications						
	PARAMETER	Symbol	Min.	Typ.	Max.	Units	Condition/Notes
	Frequency Range	F	0.5		155.52	MHz	CMOS/TTL
			10		33	MHz	Sinewave
	Operating Temperature	T _A	(See ordering information)				
	Storage Temperature	T _s	-55		+125	°C	
	Frequency Stability	ΔF/F	(See ordering information)				
	Aging						
	1st Year				1.5	ppm	
	Thereafter (per year)				0.5	ppm	
	Control Voltage	V _c	0	2.5	5.0	V	Negative Slope
	Tuning Range				5	ppm/V	
	Modulation Bandwidth	f _m	10			KHz	
	Input Impedance	Z _{in}	100k			Ω	
	Input Voltage	V _{dd}	4.75	5.0	5.25	V	
	Input Current	I _{dd}			30	mA	0.5 to 70 MHz
					45	mA	70.001 to 155.52 MHz
	Output Type						CMOS/TTL/Sinewave
	Load		5 TTL or 15 pF Max.				CMOS/TTL
			50 Ohms to ground				Sinewave
	Symmetry (Duty Cycle)		(See ordering information)				See Note 1
	Logic "1" Level	V _{oh}	4.5			V	CMOS/TTL
	Logic "0" Level	V _{ol}			0.5	V	CMOS/TTL
	Output Power	P _o	0			dBm	
	Rise/Fall Time	T _r /T _f			10	ns	See Note 2
	0.5 to 30 MHz				5	ns	
	30.001 to 155.52 MHz						
	Start up Time		10			ms	
	Phase Noise (Typical)		10 Hz	100 Hz	1 kHz	10 kHz	100 kHz
	@ 19.44 MHz	-78	-103	-136	-143	-146	dBc/Hz
	@ 155.52 MHz	-42	-66	-76	-80	-89	dBc/Hz

1. Symmetry is measured at 1.4 V with TTL load; and at 50% V_{dd} with HCMOS load.
2. Rise/fall times are measured between 0.5 V and 2.4 V with TTL load; and between 10% V_{dd} and 90% V_{dd} with HCMOS load. Output levels to +8 dBm are available. Contact factory for non-standard requirements.

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.

Please see www.mtronpti.com for our complete offering and detailed datasheets. Contact us for your application specific requirements: MtronPTI 1-800-762-8800.