



## Specification for a Sinewave Output Thru-Hole OCXO MtronPTI P/N: XO5081-068

### Electrical Specifications:

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions	
Nominal Frequency	F <sub>0</sub>		100.0000		MHz		
<b>Frequency Stability</b>							
Over Temperature Range		-0.2		+0.2	ppm	Over 0°C to +70°C Ref. 25 °C	
Aging				±3.0	ppm	Per year	
[After 72-hours of operation]				±10.0	ppm	10-years	
<b>RF Output</b>							
Output Type		Sinewave					
Output Level		+7.0			dBm	Into a nominal 50Ω load	
Output Load			50		Ω	±10%	
<b>Frequency Adjustment</b>							
Adjustment Method		External Voltage					
Tuning Voltage	V <sub>TUNE</sub>	0		+10.0	V <sub>DC</sub>		
Tuning Range			±3.0		ppm	Sufficient for 10-years aging offset	
Tuning Bandwidth		1000			Hz		
Tuning Slope		Positive					
<b>Phase Noise</b>							
SSB Phase Noise				-50	dBc/Hz	@ 1Hz Offset	
				-88		@ 10Hz Offset	
				-118		@ 100Hz Offset	
				-145		@ 1kHz Offset	
				-165		@ 10kHz Offset	
				-165		@ 100kHz Offset	
<b>Additional Parameters</b>							
Supply Voltage	V <sub>S</sub>	11.4	12.0	12.6	V <sub>DC</sub>		
Maximum Current Consumption				300	mA		
Oven Ready (Open Collector)	Low	Oven NOT Ready					3mA sink Max
	High	Oven Ready					
Harmonics				-20	dBc		
Warm-up Time @ 0°C				3	Minutes	To within 0.1ppm of the frequency @ 1 hour after 24-hours off	

### Physical & Environmental:

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Operating Temperature	OTR	0		+70	°C	
Storage Temperature	STR	-55		+85	°C	
Package	Reference Drawing					

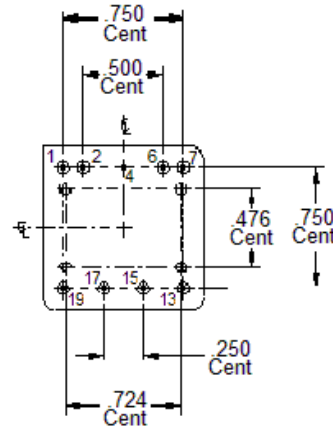
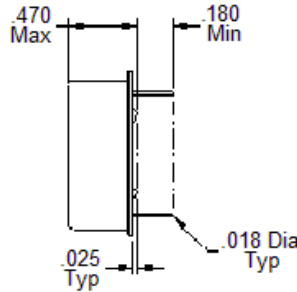
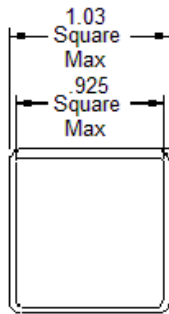
## Specification for a Sinewave Output Thru-Hole OCXO MtronPTI P/N: XO5081-068

### Mechanical and Pinout:

Part Marking	
Line 1	MtronPTI
Line 2	XO5081-068
Line 3	10.0000MHz
Line 4	Serial Number
Line 5	Date Code

Legend	
yy	Year
ww	Work Week

Pin	Function
1	RF Output
4	Case Ground
7	V <sub>TUNE</sub>
17	Oven Ready
19	Supply Voltage
2, 6, 13, 15	No Connection



Pin Numbers Shown for Reference Only  
All Dimensions are in Inches

### Data Sheet Revision Table:

Date	Rev.	Author	Details of Revision
7/01/13	B	BRM	Corrected a typographical error in the Maximum Current Consumption specification point. Specifically, removed the 3.6 in the typical column.
6/18/13	A	BRM	Corrected the misspelling of the customer name in the datasheet header and the model number in the marking specification.
4/17/13	0	BRM	Original Release.