

## Specification for a Sinewave Output Thru-Hole OCXO

### MtronPTI P/N: XO5085-106R

#### Electrical Specifications:

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Nominal Frequency	F <sub>0</sub>		100.000000		MHz	
<b>Frequency Stabilities</b>						
vs. Temperature	ΔF <sub>T</sub> /F	-100		+100	ppb	Over the Operating Temperature Range
vs. Supply voltage variation		-30		+30	ppb	+/-250mV change in supply voltage
Daily Aging		-5		+5	ppb	After 30-days Power On
1 Year Aging		-0.5		+0.5	ppm	
20-Years Aging		-1.25		+1.25	ppm	
Retrace		-20		-20	ppb	After 30-minutes power on following 24-hours off
<b>RF Output</b>						
Output Type			Sinewave			
Output Level			+10	+15.0	dBm	
Output Load			50		Ω	±10%
<b>Frequency Adjustment</b>						
Adjustment Method			External Voltage			
Adjustment Voltage	V <sub>TUNE</sub>	0		+10	V <sub>DC</sub>	
Adjustment Range		+/-1.0			ppm	Over all conditions
Adjustment Slope			Positive			
<b>Additional Parameters</b>						
Phase Noise (Under Static Conditions)				-100	dBc/Hz	10Hz Offset
				-130	dBc/Hz	100Hz Offset
				-155	dBc/Hz	1kHz Offset
				-165	dBc/Hz	10kHz Offset
				-168	dBc/Hz	100kHz Offset
Harmonics				-30	dBc	
Spurious				-75	dBc	
Warm-up Time				5	minutes	To within ±0.1ppm of the frequency after 1-hour of operation @ 25°C
<b>Temperature, Supply Voltage &amp; Power Consumption</b>						
Operating Temperature	OTR	-40		+85	°C	Full Specification Compliance
Storage Temperature	STR	-55		+85	°C	
Operating Voltage	V <sub>CC</sub>	+11.4	+12.0	+12.6	V <sub>DC</sub>	
Power Consumption			1.0		Watts	Steady state @ 25°C, In Still Air
				3.6	Watts	@ Warm-up

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### Environmental Conditions:

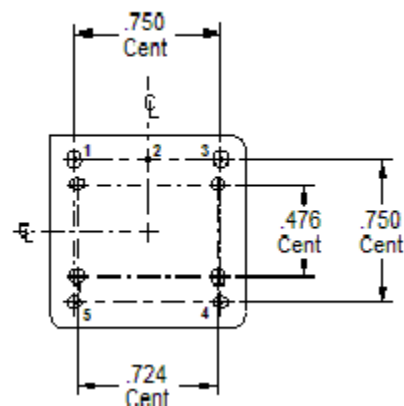
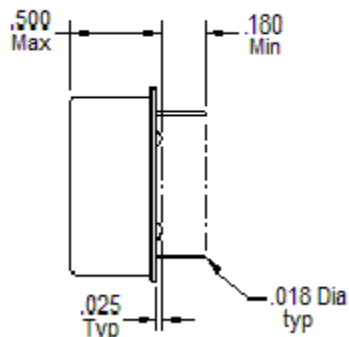
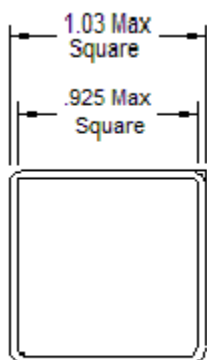
Seal	Hermetic
RoHS	Full RoHS Compliance

### Mechanical, Marking and Layout Information:

Part Marking	
Line 1	MtronPTI
Line 2	XO5085-106R
Line 3	100.0000MHz
Line 4	Serial Number
Line 5	Date Code

Legend	
yy	Year
ww	Work Week

Pin	Function
1	RF Output
2	Case Ground
3	V <sub>TUNE</sub>
4	N/C
5	Supply Voltage



### Data Sheet Revision Table:

Date	Rev.	Orig.	Details of Revision
01-30-19	A	DPD	Original release