

Specification for a Sinewave Output OCXO

MtronPTI P/N: XO5085-069R

Electrical Specifications:

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Nominal Frequency	F _o		100.000000		MHz	
Frequency Stabilities						
vs. Temperature	ΔF _T /F	-100		+100	ppb	Over the Operating Temperature Range
vs. Supply voltage variation		-15		+15	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		-2.0		+2.0	ppm	
RF Output						
Output Type		Sinewave				
Output Level			+10		dBm	
Output Load			50		Ω	±10%
Frequency Adjustment						
Adjustment Method		External Voltage				
Input Impedance		100			Kohm	
Modulation Bandwidth		1			KHz	
Adjustment Voltage	V _{TUNE}	0		+10	V _{DC}	
Adjustment Range		±1.5			ppm	Over all conditions
Adjustment Slope		Positive				
Additional Parameters						
Phase Noise (Under Static Conditions)				-97	dBc/Hz	10Hz Offset
				-125	dBc/Hz	100Hz Offset
				-153	dBc/Hz	1kHz Offset
				-163	dBc/Hz	10kHz Offset
				-170	dBc/Hz	100kHz Offset
				-170	dBc/Hz	1MHz Offset
				-170	dBc/Hz	10MHz Offset
G-sensitivity				0.3	ppb/g	Worst case axis.
Harmonics				-25	dBc	
Spurious				-75	dBc	
Warm-up Time				5	minutes	To within ±0.1ppm of the frequency after 1-hour of operation @ 25°C
Temperature, Supply Voltage & Power Consumption						
Operating Temperature	OTR	-40		+85	°C	Full Specification Compliance
Storage Temperature	STR	-55		+85	°C	
Operating Voltage	V _{CC}	+11.4	+12.0	+12.6	V _{DC}	
Power Consumption				1.2	Watts	Steady state @ 25°C, In Still Air
				4.0	Watts	@ Warm-up

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Environmental Conditions:

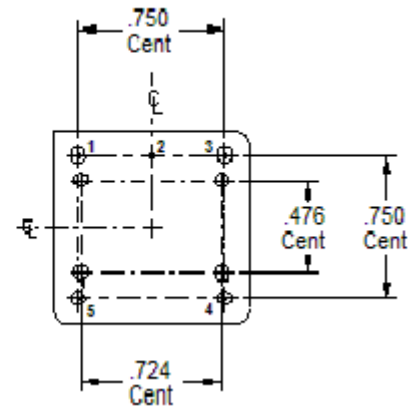
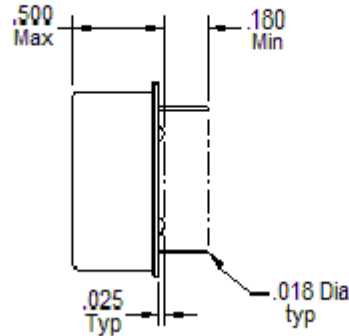
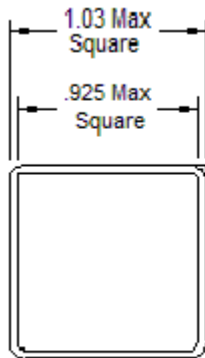
Seal	Hermetic
RoHS	Full RoHS Compliance

Mechanical, Marking and Layout Information:

Part Marking	
Line 1	MtronPTI
Line 2	XO5085-069R
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 _{TUNE}
4	N/C
5	Supply Voltage



UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES
DECIMALS
.XX ± .01
.XXX ± .005

Data Sheet Revision Table:

Date	Rev.	Orig.	Details of Revision
09/27/17	D	DPD	Modulation Bandwidth spec added.
03/15/17	C	DPD	Typo in heading updated: Removed "SMT" wording.
02/22/17	B	DPD	Operating temperature updated from -20C to +75C to -40C to +85C
02/17/17	A	DPD	Original release