

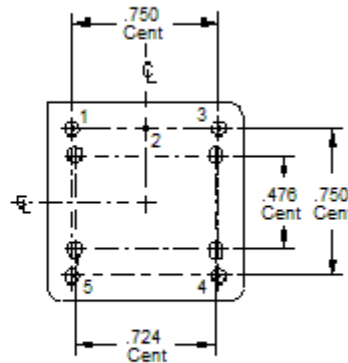
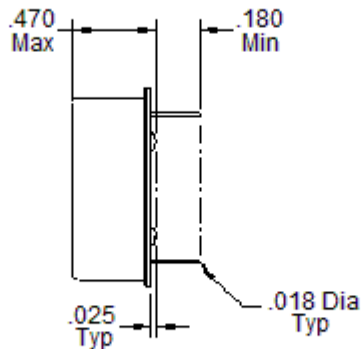
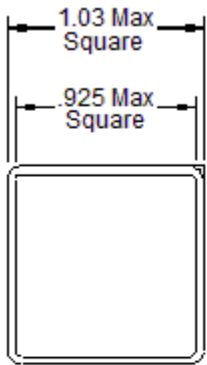
ELECTRICAL SPECIFICATIONS

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Nominal Frequency	F ₀		12.800000		MHz	
Initial Tolerance	ΔF/F	-200		+200	ppb	@ 25°C at time of shipment
Frequency Stabilities						
vs. Temperature	ΔF/F	-20		+20	ppb	T= -40°C to +85°C
vs. Supply Voltage		-5		+5	ppb	±5% change in Supply Voltage
vs. Load		-1		+1	ppb	±10% change in Supply Load
Short Term Stability			1 x 10 ⁻¹¹		per sec.	Allan Variance (in still air) Tau = 0.1 sec & 1sec
Daily Aging		-1		+1	ppb	After 30-days operation
Yearly Aging		-100		+100	ppb	
RF Output						
Output Type		HCMOS				
Output Load			10		pF	
Symmetry (duty cycle)	T _{DC}	40	50	60	%	@ 50% of waveform
Rise/Fall Time	T _R /T _F			7	nsec	From 10% to 90% V _{OUT}
Logic "1" Level	V _{OH}	90% V _s			V	HCMOS Load
Logic "2" Level	V _{OL}			10% V _s	V	HCMOS Load
Additional Parameters						
Phase Noise (Under Static Conditions)			-130	-130	dBc/Hz	100Hz Offset
			-145	-145	dBc/Hz	1kHz Offset
			-150	-150	dBc/Hz	10kHz Offset
			-150	-150	dBc/Hz	100kHz Offset
Warm-up Time	ΔF/F			4	Minutes	To be within ±50ppb of the frequency after 1-hour of operation after 24-hours off
Start Up Time				250	Msec	The OCXO will achieve an HCMOS output signal within the time specified but it will not meet all electrical performance parameters until the Warm-up time specified has passed
Temperature, Supply Voltage and Power Consumption						
Operating Temperature		-40		+85	°C	
Storage Temperature		-55		+85	°C	
Operating Voltage	V _{CC}	+3.135	+3.3	+3.465	V _{DC}	
Power Consumption				1.5	Watts	Steady state @ 25°C, In Still Air
				4.0	Watts	@ Warm-up

ENVIRONMENTAL CONDITIONS

Seal	Hermetic
MSL	Level 1
Shock (survival)	500G's per ,IL-STD-202F, Method 213B, Test Condition D
Sinusoidal Vibration	0.06' D.A. or 10G's Peak, 10 to 500Hz per MIL-STD-202F, Method 204D
Random Vibration	5.35G's RMS, 20 to 200Hz per MIL-STD-202F, Method 214, Test Condition 1A, 15-minutes each axis
Marking Permanency	Per MIL-STD-202F, Method 215J
RoHS	Full RoHS Compliance

MECHANICAL AND PIN OUT INFORMATION



Pin	Function
1	RF Output
2	Case Ground
3	N/C
4	N/C
5	Supply Voltage

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

Pin Numbers Shown For Reference Only
 All Dimensions are in Inches

Part Marking	
Line 1	MtronPTI
Line 2	XO5084-031R
Line 3	12.800MHz
Line 4	Serial Number
Line 5	Date Code

Data Sheet Revision Table

Date	Rev	Author	Details of Revision
08/31/12	2	AR	Original Release

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