2525 Shader Road Orlando Florida 32804 USA
Phone: 407-298-2000 Fax: 407-293-2979
Website: www.mtronpti.com AMEX: LGL

Specification for a Sine Output Thru-Hole OCXO
MtronPTI P/N: XO5123-061R

Electrical Specifications:

Unless otherwise specified; T= +25°C, V_S = +12V_{DC}, V_C = +2.5V_{DC}, Load= 50Ω

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Nominal Frequency	F_O		10.000000		MHz	
Initial Frequency		-0.1		+0.1	ppm	At time of shipment
Frequency Stabilities						
vs. Temperature Range		-5.0		+5.0	ppb	-40°C to +80°C
vs. Supply Voltage		-1.0		+1.0	ppb	±5% change in voltage
vs. Load		-1.0		+1.0	ppb	±5% change in load
Aging per Year		-20		+20	ppb	After 30-days Power On
Short Term Stability (Allan deviation)			5		$x10^{-12}$	Per Second.
RF Output						
Output Type			Sinewave			
Output Load			50		Ω	±5%
Level	V_{OH}	+8	+10	+12	dBm	In a 50Ω load
Startup Time				500	ms	
Frequency Adjustment						
Method			External Voltage Tuned			
Tuning Slope			Positive			
Tuning Voltage	V_{TUNE}	0	+2.5	+5	V_{DC}	
Tuning Range		±0.4		±1.5	ppm	
Input Impedance		10			kΩ	
Linearity				10	%	
Vref			4.1		V	Max source current of 0.5mA
Other Parameters						
SSB Phase Noise (under static conditions)				-105	dBc/Hz	@ 1Hz Offset
				-130		@ 10Hz Offset
				-153		@ 100Hz Offset
				-158		@ 1kHz Offset
				-160		@ 10kHz Offset
				-160		@ 100kHz Offset
Warm-up Time	ΔF/F			3	Minutes	To be within ±20ppb, @ 25˚C, referenced to the frequency after 24-hour power on
Harmonics				-30	dBc	
Spurious				-70	dBc	
Supply Voltage & Power Consumption						
Supply Voltage	V_S	11.4	12.0	12.6	V_{DC}	
Power Consumption			2.1		Watts	Steady state @ 25°C, in still air
				5	Watts	@ turn on Over operating temperature range

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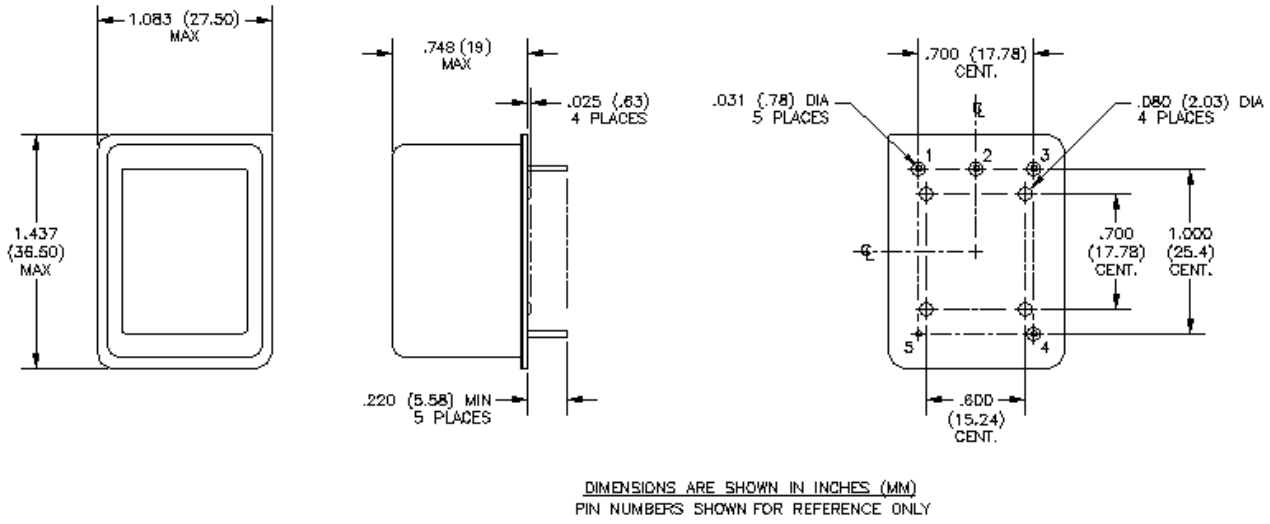
Environmental Conditions:

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Operating Temperature	OTR	-40		+80	°C	
Storage Temperature	STR	-40		+90	°C	
Shock (survival)	75g /3ms – ½ sine / EC 68-2-27					
Vibration (survival)	5g; 10 – 500 Hz / IEC 68-2-06					
Humidity	0% to 98%					
Solderability	Per EIAJ-STD-002					
RoHS	Full RoHS Compliance					

Mechanical, Marking and Pinout Information:



DIMENSIONS ARE SHOWN IN INCHES (MM)
PIN NUMBERS SHOWN FOR REFERENCE ONLY

Pin	Function
1	V_{TUNE}
2	Vref
3	Supply Voltage
4	RF_{OUT}
5	Ground

Data Sheet Revision Table:

Date	Rev.	Orig.	Details of Revision
06-25-18	B	DPD	Vref added
06-20-18	A	DPD	Original Release.