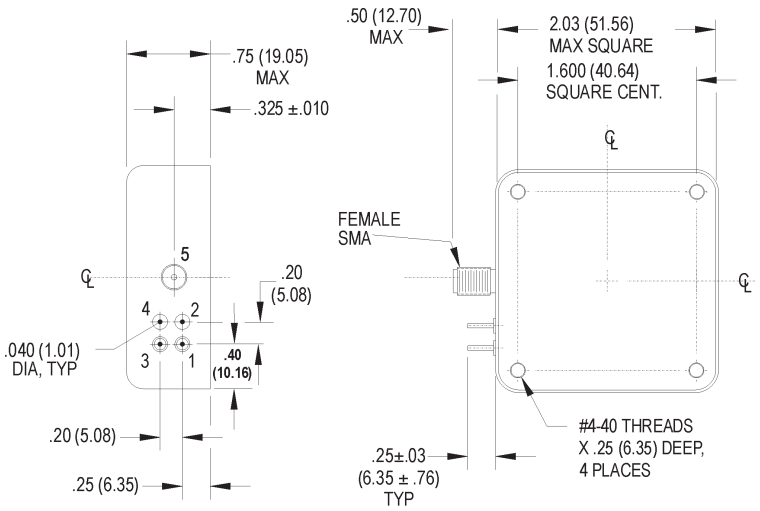
XO5051 Series

2x2 inch, 12.0 & 15.0 Volt, Sinewave, OCXO

- **Low noise and high output level**
- **SMA connector**



Dimensions are in inches (mm)

Pin Connections:
1. Supply (+)
2. Case ground & supply return
3. Frequency adjust
4. Case ground
5. RF out (Female SMA)

Pin numbers shown for reference only.
Numbers are not marked on unit.

Ordering Information

XO5051 XXX

Product Series

Assigned Customer Specific

Optional Frequency/Temperature Stability (ppm) TemperatureRange (°C)	Stability Limits	
	SC-Cut	AT-Cut
0 to +50	$\pm 3 \times 10^{-8}$	$\pm 3 \times 10^{-7}$
0 to +70	$\pm 5 \times 10^{-8}$	$\pm 5 \times 10^{-7}$
-10 to +70	$\pm 6 \times 10^{-8}$	$\pm 6 \times 10^{-7}$
-30 to +70	$\pm 8 \times 10^{-8}$	$\pm 8 \times 10^{-7}$
-40 to +70	$\pm 1 \times 10^{-7}$	$\pm 1 \times 10^{-6}$

	PARAMETER	Symbol	Min.	Typ.	Max.	Units	Condition
Electrical Specifications	Frequency Range	F_{ON}	10		125	MHz	
	Operating Temperature	T_A		0 to +70		°C	
	Stability Over Temperature	ΔF/F	±0.3	±0.5		ppm	AT-cut
		ΔF/F	±30	±100		ppb	SC-cut
	Short Term Stability			0.5		ppb	
	Yearly Aging			±0.5		ppm	AT-cut
				±0.25		ppm	SC-cut
	10-Years Aging			±4		ppm	AT-cut
				±3		ppm	SC-cut
	Frequency vs. Supply			±2		ppb	
	Frequency vs. Load			±2		ppb	
	Supply Voltage	V_S		12 to 15		Volts	Consult Factory
	Power Consumption						
	Warm-Up @ 0°C				5	Watts	
	Steady Sate @ 25°C				2	Watts	
	Warm-Up Time @ 0°C			Within ±20 a 10^{-8} within 5 minutes			
	Output Signal			Sinewave			
	Level			20		dBm	
	Load			50		Ω	
	Frequency Adjustment (Pin 3)						
	Slope			Positive			
	External Voltage	V_C	0.5		4.5	Volts	
	Range			±3		ppm	
	Range			±1		ppm	
	Input Impedance (Pin 3)		20			KΩ	
	Phase Noise			AT-Cut / SC-Cut			
	Typical @ 100MHz						
	1 Hz			-45 / -60		dBc/Hz	
	10 Hz			-75 / -90		dBc/Hz	
	100 Hz			-105 / -135		dBc/Hz	
	1 kHz			-135 / -140		dBc/Hz	
	10 kHz			-150 / -150		dBc/Hz	
	≥100 kHz			-170 / -170		dBc/Hz	
Environmental	Mechanical Shock		Per MIL-STD-202, Method 213, Condition C				
	Vibration		Per MIL-STD-202, Method 201 & 204				
	Storage Temperature		-55°C to 125°C				

MtronPTI reserves the right to make changes to the product(s) and service(s) described herein without notice. No liability is assumed as a result of their use or application.