XO5051 Series
2x2 inch, 12.0 & 15.0 Volt, Sinewave, OCXO
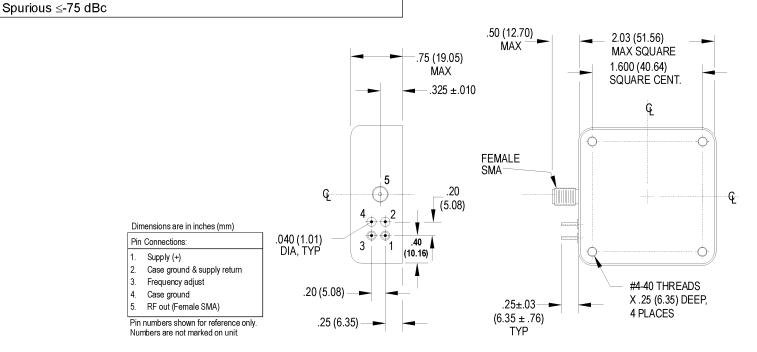
MtronPTI

- **Low noise and high output level**

- **SMA connector**

Model XO5051	Frequency (MHz)	Temperature Range (°C)	Temperature Stability	Aging Yearly		Output	Supply Voltage
AT-Cut	100	0 to +70	$\pm5.0 \times 10^{-7}$	$\pm1 \times 10^{-6}$		Sinewave	+12 Vdc
Options	10 - 125	See Table		Consult Factory			+15 Vdc

Additional Specifications

Aging over first year	$\leq\pm3 \times 10^{-6}$/10 years
Warm up time	$\leq\pm2 \times 10^{-8}$ within 5 minutes
Current	<150 mA @ 25°C
Warm up current	<400 mA
Aging adjustment	
Voltage range	0.5 V to 4.5 V
Deviation	$\pm3 \times 10^{-6}$ min
Slope	Positive

Phase Noise @ 100 MHz	**AT-Cut**	**SC-Cut**
1 Hz	-45 dBc/Hz	-60dBc/Hz
10 Hz	-75dBc/Hz	-90 dBc/Hz
100 kHz	-105 dBc/Hz	-120 dBc/Hz
1 kHz	-135 dBc/Hz	-140 dBc/Hz
10 kHz	-150 dBc/Hz	-150 dBc/Hz
$\geq$100 kHz	-170 dBc/Hz	-170 dBc/Hz

Output Levels
+20 dBm into 50 Ω
Spurious $\leq$-75 dBc

Optional Frequency/Temperature Stability (ppm) TemperatureRange (°C)	Stability Limits	
	SC-Cut	**AT-Cut**
0 to +50	$\pm3 \times 10^{-8}$	$\pm3 \times 10^{-7}$
0 to +70	$\pm5 \times 10^{-8}$	$\pm5 \times 10^{-7}$
-10 to +70	$\pm6 \times 10^{-8}$	$\pm6 \times 10^{-7}$
-30 to +70	$\pm8 \times 10^{-8}$	$\pm8 \times 10^{-7}$
-40 to +70	$\pm1 \times 10^{-7}$	$\pm1 \times 10^{-6}$

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.

.75 (19.05) MAX
.325 ±.010
.040 (1.01) DIA, TYP
.20 (5.08)
.40 (10.16)
.20 (5.08)
.25 (6.35)

.50 (12.70) MAX
2.03 (51.56) MAX SQUARE
1.600 (40.64) SQUARE CENT.
FEMALE SMA
#4-40 THREADS X .25 (6.35) DEEP, 4 PLACES
.25±.03 (6.35 ± .76) TYP

Revison: 6-29-06