

Specification for SMD Stratum 3E Compliant OCXO
MtronPTI P/N: XO5184-040sR

Electrical Specifications:

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Nominal Frequency	F ₀		25		MHz	
Frequency Stabilities						
Overall		-4.6		+4.6	ppm	
vs. Temperature	ΔF _T /F			10	ppb	over operating temperature range
vs. Supply Voltage	ΔF _{VDD} /F	-4		+4	ppb	100mV change in Voltage
Allan Deviation (in still air)	A _{DEV}		2 x 10 ⁻¹¹			Tau = 1 sec
Holdover/Day		-1		+1	ppb	Constant voltage and load; <±3°C change in 24 hours
1 Year Aging				±100	ppb	After 30 days continuous operation @ +25°C
20 Year Aging				±2.0	ppm	After 30 days continuous operation @ +25°C
RF Output						
Output Type		HCMOS				
Output Load			15		pF	
Symmetry (duty cycle)	T _{DC}		50		%	@ 50% of waveform
Logic "1" Level	V _{OH}	90% V _{DD}			V	
Logic "0" Level	V _{OL}			10% V _{DD}	V	
Frequency Adjustment						
Adjustment Method		External Voltage				Positive Slope
Adjustment Voltage	V _{TUNE}	0		+3.0	V _{DC}	
Adjustment Range			±3.0		ppm	
Operating Temperature	T _A	-40		+85	°C	
Storage Temperature	T _S	-50		+105	°C	
Operating Voltage	V _{DD}	3.135	3.3	3.465	V	
Current Consumption			1.0		W	Steady state @ 25°C In still air
				3.5	W	@ warm-up
Warm-up Time (Restabilization)				5	Minutes	Time to be within ±0.1 ppm of the frequency after 1 hour of operation @ 25°C
Additional Parameters						
SSB Phase Noise			-90		dBc/Hz	10 Hz
			-115		dBc/Hz	100 Hz
			-130		dBc/Hz	1 kHz
			-145		dBc/Hz	10 kHz

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Environmental Conditions:

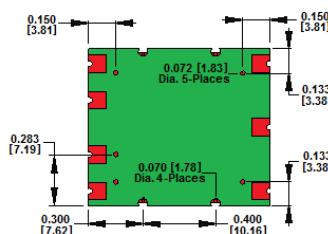
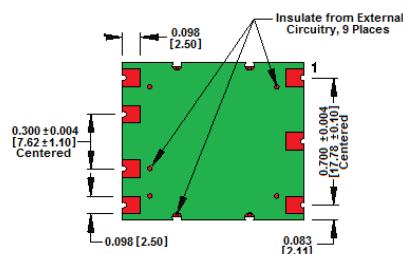
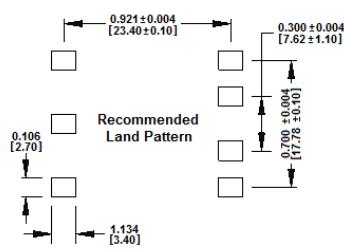
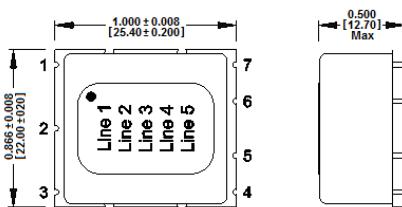
Mechanical Shock	Per MIL-STD-202, Method 213, (2000 g's, 0.3 ms duration, ½ Sinewave)
Vibration (survival)	Per MIL-STD-202, Method 201 & 204 (10 g's from 20-2000 Hz)
Solderability	Per EIAJ-STD-002
Soldering Conditions	See figure 1
RoHS	Full RoHS 6 Compliance

Mechanical, Marking and Layout Information:

Part Marking	
Line 1	MtronPTI
Line 2	XO5184-040sR
Line 3	25MHz
Line 4	Serial Number
Line 5	Date Code

Legend	
yy	Year
ww	Work Week

Pin	Function
1	EFC
2	N/C
3	Supply
4	RF Output
5	N/C
6	N/C
7	Ground



All Dimensions are in Inches [mm]
 PAD Numbers are Shown for Reference Only
 Tolerances Unless Otherwise Cited are
 .XX = ±.01
 .XXX = ±.005

■ Exposed Metalization
 ■ Solder Mask

Note: The XO5184-040sR is a non-hermetic and non-washable OCXO

Solder Profile:

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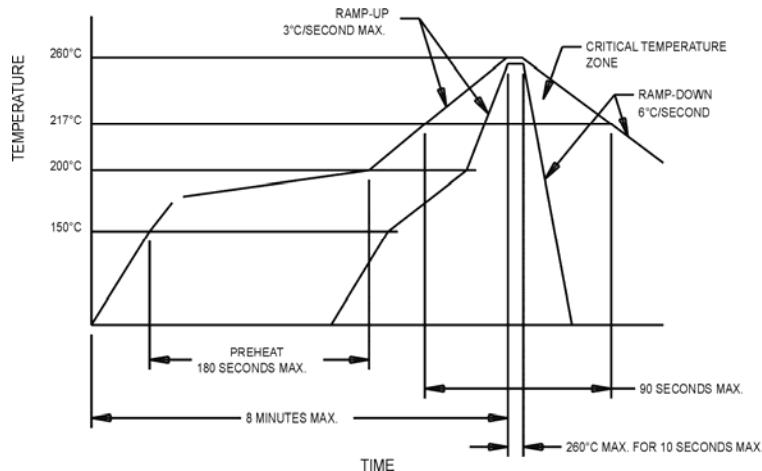


Figure 1

Data Sheet Revision Table:

Date	Rev.	Author.	Details of Revision
05-18-16	0	MM	Original Release