

## SPECIFICATION FOR SMT TCXO MtronPTI P/N M6171S004

### Electrical Specifications:

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Frequency of Operation	F <sub>0</sub>		44.000000		MHz	
Frequency Tolerance		-1.0		+1.0	ppm	@ +25°C
<b>Frequency Stability</b>						
Overall Stability		-15.0		+15.0	ppm	Inclusive of initial calibration, supply voltage, operating temperature, shock, vibration and 30 years of aging @ +55°C.
Frequency Vs. Supply			± 0.02	± 0.1	ppm	For 5% supply variation
Frequency Vs. Load			± 0.02	± 0.1	ppm	For 5% load change
<b>Output</b>						
Output Type		HCMOS Compatible				
Output Load			15		pF	
Symmetry (duty cycle)	t <sub>DC</sub>	40	50	60		@ 50% of V <sub>DD</sub>
Logic Level "1"	V <sub>OH</sub>	80			% V <sub>DD</sub>	I <sub>OH</sub> /I <sub>OL</sub> = ±4 mA, V <sub>DD</sub> +3.3 V
Logic Level "0"	V <sub>OL</sub>			20	% V <sub>DD</sub>	I <sub>OH</sub> /I <sub>OL</sub> = ±4 mA, V <sub>DD</sub> +3.3 V
Rise/Fall Time	t <sub>R</sub> /t <sub>F</sub>			6.5	ns	Ref. 10% and 90%
Tri-state Function		Logic "1", or floating, output Enabled. Logic "0", output Disabled.				Pad C
Start-up Time	T <sub>SU</sub>			10	mS	
<b>Additional Specifications</b>						
Phase Noise			-85		dBc/Hz	@ 10 Hz
			-115			@ 100 Hz
			-138			@ 1 kHz
			-152			@ 10 kHz
			-156			@ 100 kHz
<b>Supply Voltage &amp; Power Consumption</b>						
Operating Voltage	V <sub>DD</sub>	3.15	3.3	3.45	V	
Operating Current	I <sub>DD</sub>			6.5	mA	

### Environmental Conditions:

Operating Temperature	T <sub>A</sub>	-40		+85	°C	Device must operate between -55°C and -40°C without regard to frequency stability specification.
Storage Temperature	T <sub>S</sub>	-55		+125	°C	
Mechanical Shock	Per MIL-STD-202, Method 213, Condition C (100 g's, 6 ms duration, ½ sine wave)					
Vibration	Per MIL-STD-202, Method 201 & 204 (10 g's from 10-2000 Hz)					
Solderability	Per EIAJ-STD-002					
Max. Soldering Conditions	See solder profile, Figure 1					
Package Type	5.0 x 3.2 x 1.58 mm, Ceramic Leadless Chip Carrier. RoHS Compliant (M617x Series)					

## SPECIFICATION FOR SMT TCXO

### MtronPTI P/N M6171S004

#### Mechanical, Marking and Layout Information:

Pad	Function
1	N/C
A	N/C
B	N/C
2	Ground/Case
3	Output
C	Tri-state or N/C
D	Low Phase Noise Capacitor or N/C
4	Supply Voltage

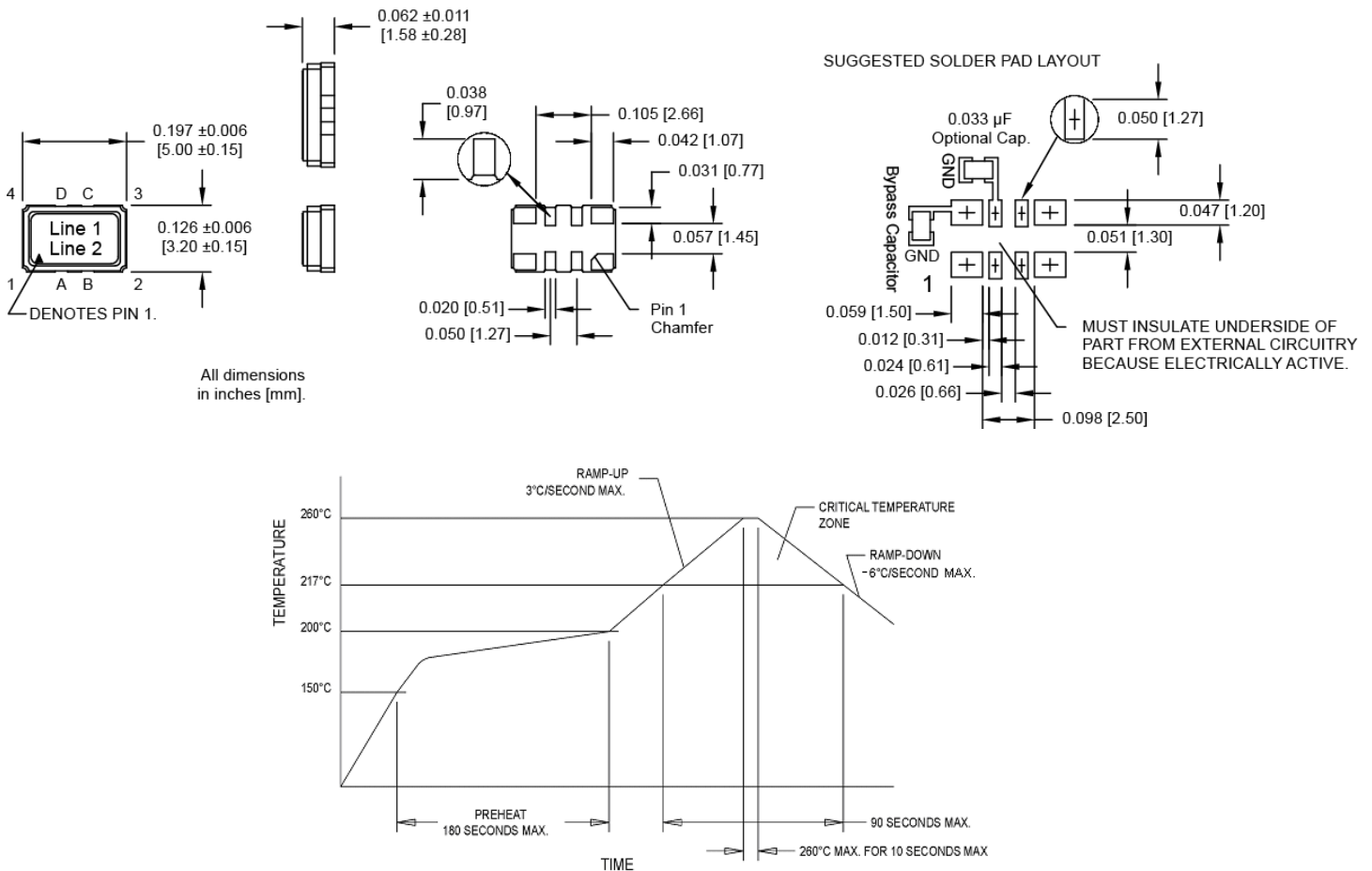


Figure 1

#### Data Sheet Revision Table:

Date	Rev.	Author	Details of Revision
05/05/14	0	MM	Original Release.
07/09/14	A	MM	Changed output type.