

1703 E. Highway 50 Yankton, SD 57078 USA Phone: 800-762-8800 or 605-665-9321 Fax: 605-665-1709

Website: www.mtronpti.com



Specifications for a Stratum 3 SMT TCXO MtronPTI P/N M6151S004

Electrical Specifications:

Parameter	Symbol	Min.	Тур.	Max.	Units	Conditions
Frequency of Operation	Fo		10.000000		MHz	
Frequency Tolerance		-1.0		+1.0	ppm	@ +25°C
		F	requency Sta	bility		
Frequency Stability	ΔF/F			0.30	ppm	Over operating temperature relative to +25°C (F _{Max} – F _{Min})/2
Holdover Stability				0.34	ppm	Inclusive of drift after 24hrs and deviation over operating temperature.
Overall Stability		-4.6		+4.6	ppm	Includes initial calibration @ +25°C, deviation over temperature, holdover, variations due to supply voltage, load, reflow soldering, and aging.
Frequency Vs. Reflow		-1.0		+1.0	ppm	
Frequency Vs. Supply			± 0.02	± 0.1	ppm	For a 5% supply change
Frequency Vs. Load			± 0.02	± 0.1	ppm	For 5% load change
			Output			
Output Type		CI	ipped Sinewa	ve		
Output Load			10/10		KΩ/pF	
Output Level		1.0			V_{p-p}	
			itional Specif	ications		
Tri-state Enable Logic		70% V _{DD} or floating			V	Pad 8
Tri-state Disable Logic				30% V _{DD}	V	Pad 8. Output to high-Z
Start-up Time	T _{SU}			10	mS	
Phase Noise			-101		dBc/Hz	@ 10 Hz
(Measured @ 10MHz)			-123		dBc/Hz	@ 100 Hz
			-145		dBc/Hz	@ 1 kHz
			-155		dBc/Hz	@ 10 kHz
			-156		dBc/Hz	@ 100 kHz
	Su	pply Voltage	/Current & Te	mperature F	Ranges	
Operating Voltage	V_{DD}	3.135	3.3	3.465	V	
Operating Current	I_{DD}			3.3	mA	
Operating Temperature	T _A	-40		+85	°C	
Storage Temperature	Ts	-55		+125	°C	

Environmental Conditions:

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)
Thermal Cycle	Per MIL-STD-883, Method 1010, B (-55°C to 125°C, 15 min. dwell, 10 cycles)
Hermeticity	Per MIL-STD-202, Method 112 (1 x 10 ⁻⁸ atm-cc/s of Helium)
Solderability	Per EIAJ-STD-002
Max. Soldering Conditions	See solder profile, Figure 1
Package Type	5.0 x 7.0 x 2.0mm, 10-pad Ceramic Leadless Chip Carrier. RoHS Compliant.

...when timing matters

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Mechanical, Marking and Layout Information:

Pad	Function	
1	N/C	
2	N/C	
3	N/C	
4	Ground/Case	
5	Output	
6	N/C	
7	N/C	
8	Tri-state	
9	+V _{DD}	
10	N/C	

Part Marking	
Line 1	M61 ym
Line 2	10M000

Legend		
	Υ	Year
٧	vw	Work week

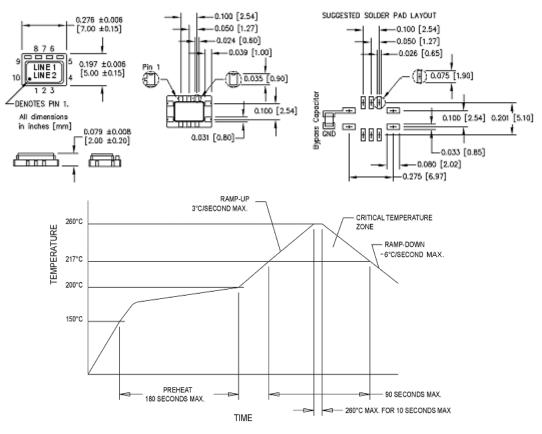


Figure 1

Datasheet Revision Table:

Date	Rev.	Author	Details of Revision
11/9/12	0	MM	Original Release.