



SPECIFICATION FOR LVPECL SMT OSCILLATOR

MtronPTI P/N: M2060S019

Electrical Specifications:

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Frequency of Operation	F _o		125.000000		MHz	
Frequency Stability						
Frequency Stability	ΔF/F	-50		+50	ppm	Includes initial tolerance @+25°C, deviation over the operating temperature range, variations due to supply, load and 1 st year aging.
RF Output						
Output Type		Complementary LVPECL				
Output Load		50 Ω to V _{CC} - 2 V				
Symmetry (duty cycle)	T _{DC}	45	50	55	%	Ref. to 50% of waveform
Logic "1" Level	V _{OH}	V _{CC} - 1.02			V	LVPECL load
Logic "0" Level	V _{OL}			V _{CC} - 1.63	V	LVPECL load
Rise/Fall Time	T _R /T _F			0.6	nS	@ 20 / 80% LVPECL
Start-up Time	T _{SU}			10	mS	T _{amb} = +25°C
Enable Logic		80% V _{CC} or N/C			V	Pad 1: Output Enabled
Disable Logic				20% V _{CC}	V	Pad 1: Output to high-Z
Supply Voltage & Power Consumption						
Operating Voltage	V _{CC}	3.135	3.300	3.465	V	
Operating Current	I _{CC}			75	mA	
Additional Specifications						
Phase Jitter	Φ _J			0.7	pS RMS	Integrated 12 kHz to 20 MHz

Environmental & Packaging Requirements:

Operating Temperature	T _A	-40		+85	°C	
Storage Temperature	T _S	-55		+125	°C	
Mechanical Shock	Per MIL-STD-202, Method 213, Condition C (100 g's, 6 ms duration, ½ sinewave)					
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	6-pad leadless ceramic 3.2 X 5.0 mm. RoHS compliant.					

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Dimensions, Marking, Pin Out:

Pad	Function
1	Enable/Disable
2	N/C
3	Ground
4	Output
5	Complimentary Output
6	+V _{CC}

Part Marking	
Line 1	125M000
Line 2	M (yy ww vv)

Legend	
yy	Year
ww	Work Week
vv	Factory code

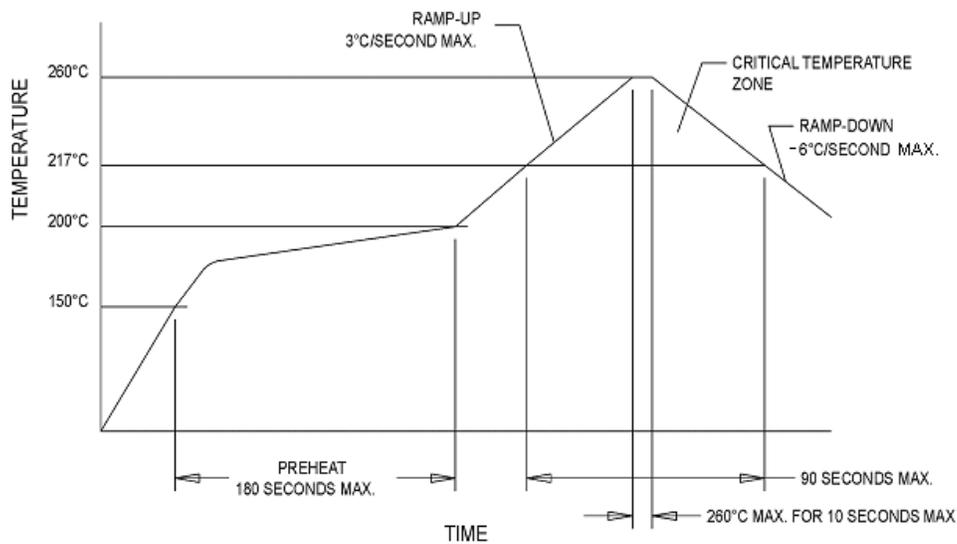
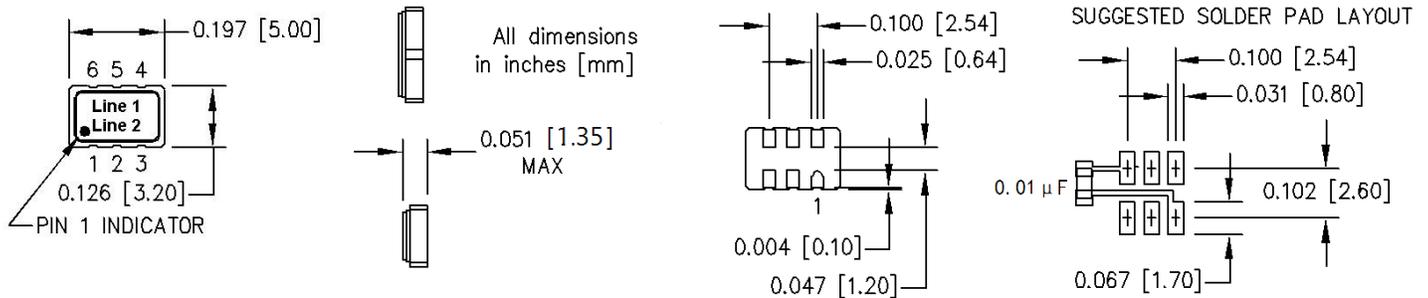


Figure 1

Datasheet Revision Table:

Date	Rev.	Author	Details of Revision
11/13/14	0	MM	Original release.