

SPECIFICATION FOR LVDS COMPATIBLE SMT OSCILLATOR MtronPTI P/N M2100S121

Electrical Specifications:

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Frequency of Operation	F _O		212.500000		MHz	
Frequency Stability	ΔF/F _O	-30		+30	ppm	Inclusive of initial tolerance, deviation over temperature, shock, vibration, voltage & load variations, and 1 st year aging.
Operating Temperature	T _A	0		+70	°C	
Aging		-3		+3	ppm	1 st year
		-1		+1	ppm	Thereafter (per year)
Operating Voltage	V _{CC}	3.135	3.3	3.465	V	
Operating Current	I _{CC}			100	mA	
Output Type		LVDS Compatible				
Output Load		100 Ω Differential				
Symmetry (duty cycle)	T _{DC}	45		55	%	@ 50% of waveform
Differential Output Voltage	V _{DIFF}	250	350	450	mV	
Common Mode Output Voltage	V _{CM}	1.125	1.20	1.275	V	
Rise/Fall Time	T _R /T _F			0.55	nS	From 20% to 80% V _{DD}
Enable Function (Pad 1)		80% V _{CC} or open			V	Output enabled
Disable Function (Pad 1)				0.5	V	Output disabled to a high-Z
Phase Jitter			0.3	1	pS	12 kHz to 20 MHz

Environmental Conditions:

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)
Storage Temperature	-55°C to +125°C
Solderability	Per EIAJ-STD-002
Max. Soldering Conditions	See solder profile, Figure 1
Package Type	5.0 x 7.0 x 1.9 mm, 6- pad ceramic leadless.

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Mechanical, Marking and Layout Information:

Pad	Function
1	Enable/Disable
2	No Connection
3	Ground
4	Output
5	Complementary Output
6	+V _{DD}

Part Marking	
Line 1	M2100S121
Line 2	212M5000
Line 3	M yyww

Legend	
yy	Year
ww	Work week

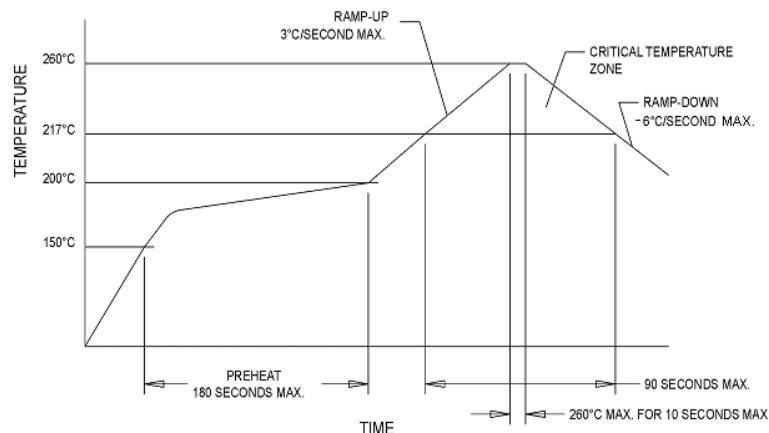
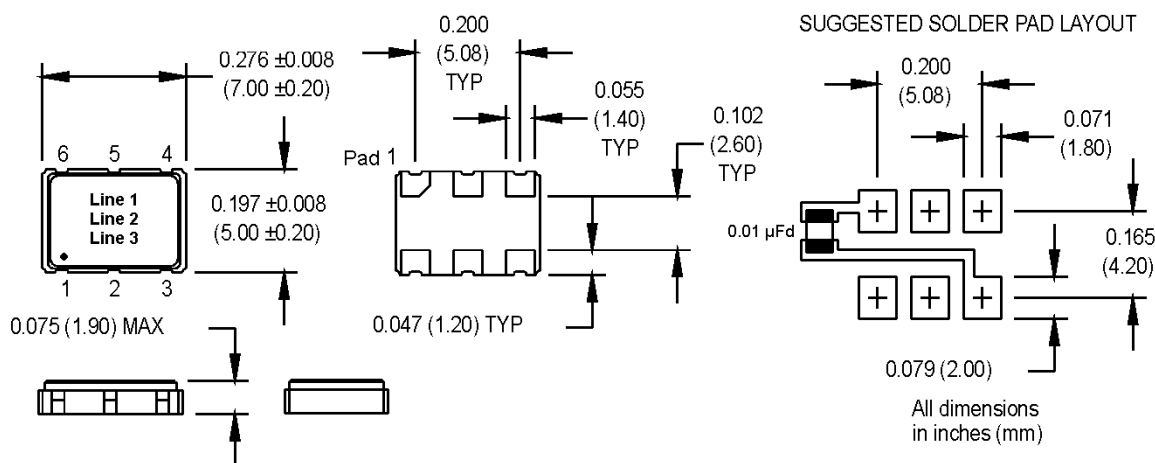


Figure 1

DATA SHEET REVISION TABLE:

Date	Rev.	Author	Details of Revision
1/28/13	0	MM	Original release.