

SPECIFICATION FOR LVPECL SMT OSCILLATOR MtronPTI P/N: M2060S039

Electrical Specifications:

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Frequency of Operation	F _O		150.000000		MHz	
Frequency Stability						
Frequency Stability	ΔF/F	-50		+50	ppm	Includes initial tolerance @ +25°C, deviation over operating temperature, variations to supply voltage, load, vibration and shock.
Aging		-5		+5	ppm	1 st year
RF Output						
Output Type		LVPECL Compatible				
Output Load		50 Ω to (V _{CC} -2.0) V _{DC}			V	
Symmetry (duty cycle)	V _{OH}	45		55	%	Ref. to 50% of waveform
Logic Level "1"	V _{OH}	V _{CC} -1.025		V _{CC} -0.880	V	
Logic Level "0"	T _{DC}	V _{CC} -1.810		V _{CC} -1.620	V	
Rise/Fall Time	T _R /T _F			0.4	ns	20% to 80% of waveform
Start-up Time	T _{SU}			10	ms	T _{ambient} = +25°C
Enable Logic		70% V _{CC} or N/C			V	Pad 1: Output Enabled
Disable Logic				30% V _{CC}	V	Pad 1: Output Disabled to high-Z
Supply Voltage & Power Consumption						
Operating Voltage	V _{CC}	3.135	3.3	3.465	V	
Supply Current	I _{CC}			75	mA	
Other Parameters						
Phase Jitter (RMS)	Φ _J			0.2	ps	12 kHz to 20 MHz

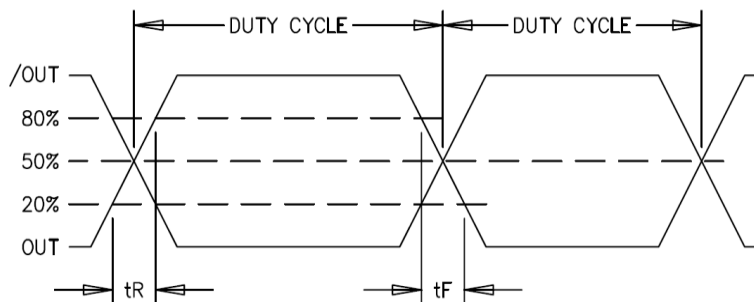
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Environmental & Packaging Requirements:

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)					
Moisture Sensitivity Level (MSL)	MSL 1					
Solderability	Per EIAJ-STD-002					
Max. Soldering Conditions	See solder profile, Figure 1					
Package Type	3.20 mm (typ) X 5.00 mm (typ) X 1.40 (max) mm 6-pad leadless ceramic. RoHS compliant.					

Output Waveform:



Marking, Pin Out:

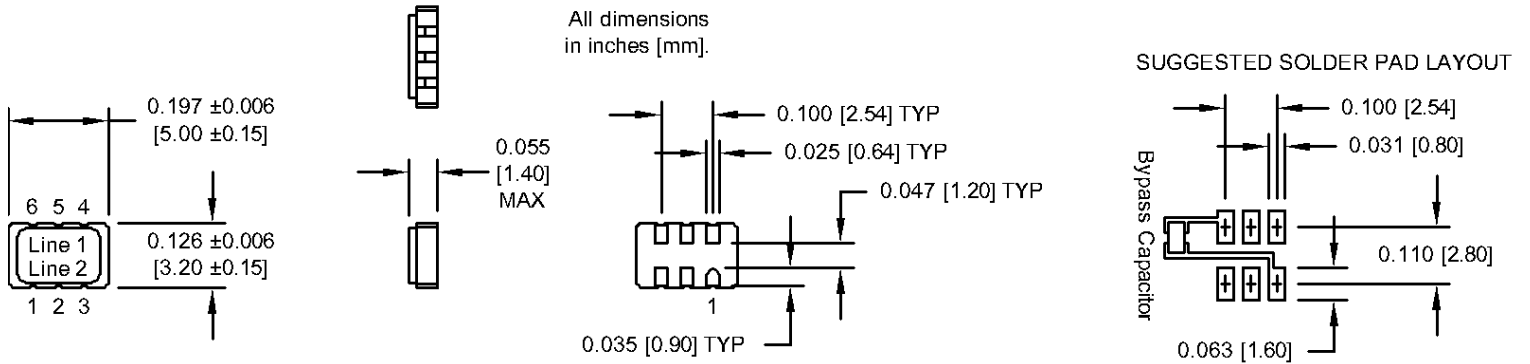
Pad	Function
1	Enable/Disable
2	N/C
3	Ground
4	Output
5	Complementary Output
6	+V _{CC}

Part Marking	
Line 1	150M000
Line 2	M yywwvv

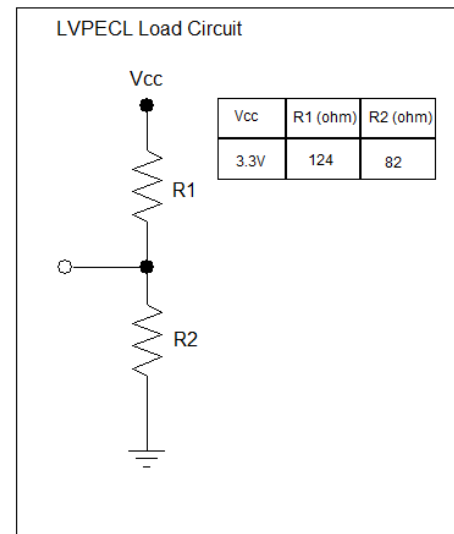
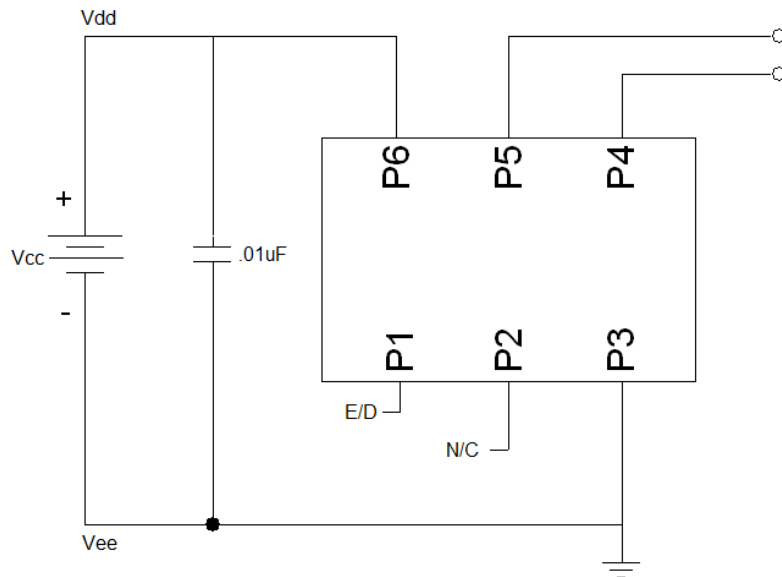
Legend	
yy	Year
ww	Work Week
vv	Factory Code

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Dimensions:



Typical Test Circuit & Load Circuit Diagrams:



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Soldering Conditions:

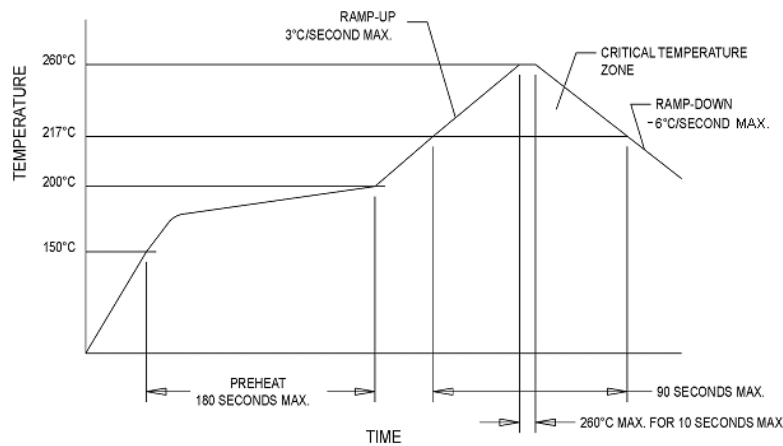


Figure 1

Datasheet Revision Table:

Date	Rev.	Author	Details of Revision
07/28/20	A	MM	Original release