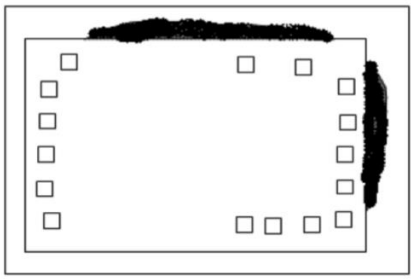
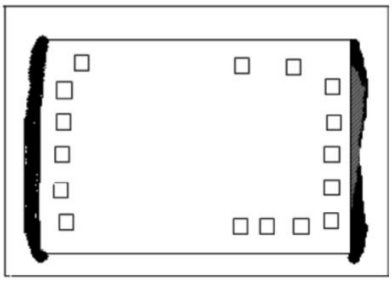
...when timing matters

SPECIFICATION FOR 3.3V LVPECL SMT OSCILLATOR
MtronPTI P/N M2100S132

Electrical Specifications:

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Frequency of Operation	F_O		200.000000		MHz	
Frequency Stability						
vs. Temperature	$\Delta F/F$	-20		+20	ppm	(Max-Min)/2
vs. Aging		-3		+3	ppm	1st year
		-1		+1	ppm	Per year thereafter.
RF Output						
Output Type		LVPECL Compatible				
Output Load		50 Ω to (V_{CC} – 2)			V	
Logic "1" Level Output	V_{OH}	V_{cc} –1.02			V	
Logic "0" Level Output	V_{OL}			V_{cc} – 1.63	V	
Symmetry (Duty Cycle)	T_{DC}	45		55	%	Ref. at 50% of waveform
Rise/Fall Time	T_R/T_F			0.35	nS	From 20% to 80% V_{CC}
Tristate Enable Logic (Pad 1)		80% V_{DD} or N/C			V	Pad 4 & 5: Output Enabled
Tristate Disable Logic (Pad 1)				0.35	V	Pad 4 & 5: Output to high Impedance
Supply Voltage & Power Consumption						
Operating Voltage	V_{cc}	3.135	3.3	3.465	V	
Operating Current	I_{cc}			130	mA	

Special Requirements:

Parameter	Specification
Internal Visual	Parts shall comply with MIL-STD-883 Method 2017 Die attach media shall be visible around at least 50 percent of the perimeter unless it is continuous on two full nonadjacent sides of the element.  Reject less than 50% of perimeter Figure 2017-3  Minimum Accept two full non-adjacent sides Figure 2017-4

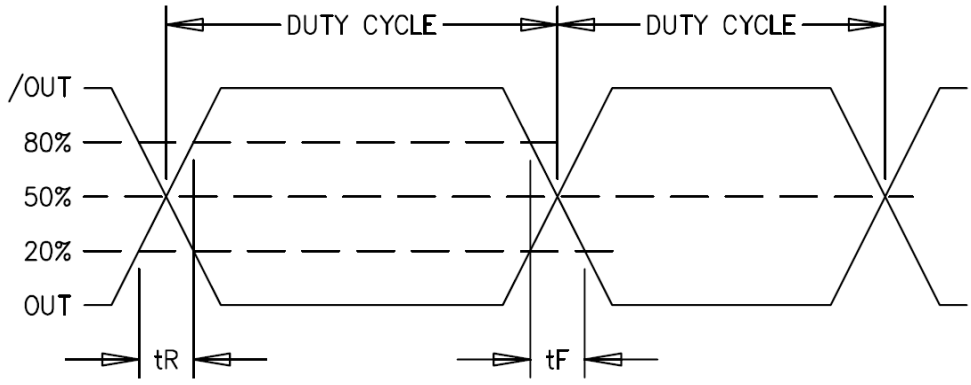
...when timing matters

SPECIFICATION FOR 3.3V LVPECL SMT OSCILLATOR
MtronPTI P/N M2100S132

Environmental Conditions:

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Operating Temperature	T_A	-40		+85	°C	
Storage Temperature	T_S	-55		+125	°C	
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 Shock	Per MIL-STD-883, Method 1011, Condition A					
Thermal Cycle	Per MIL-STD-883, Method 1010, Condition B					
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 Figure 1.					
Package Type	6-pad 5.0 X 7.0 X 1.9 mm leadless ceramic. RoHS compliant.					

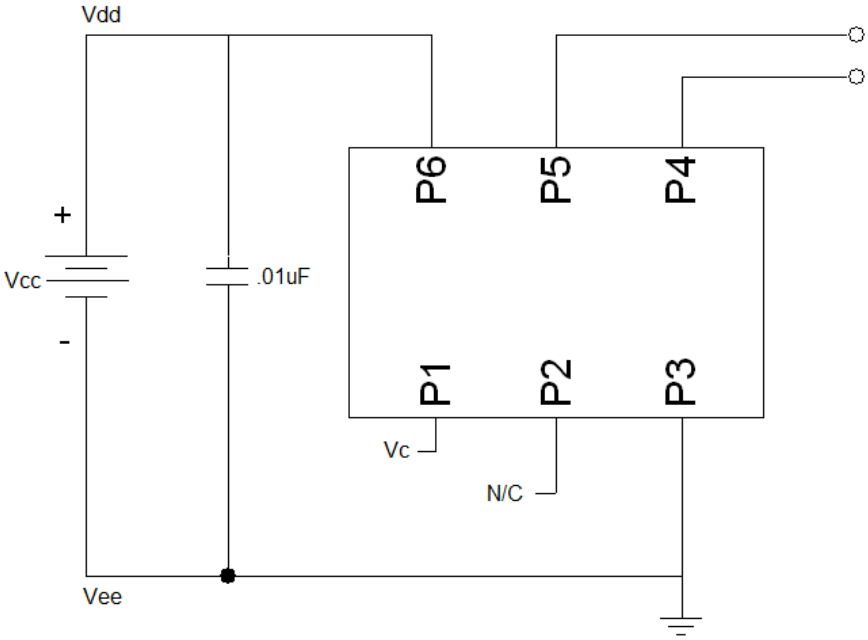
Output Waveform:

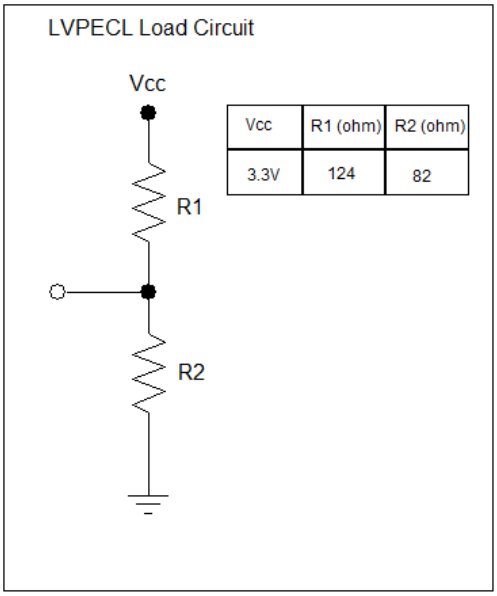


...when timing matters

SPECIFICATION FOR 3.3V LVPECL SMT OSCILLATOR
MtronPTI P/N M2100S132

Typical Test Circuit & Load Circuit Diagrams:





Soldering Conditions:

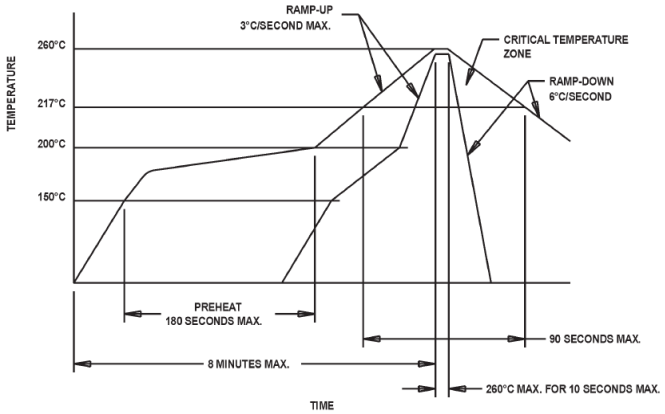


Figure 1

...when timing matters

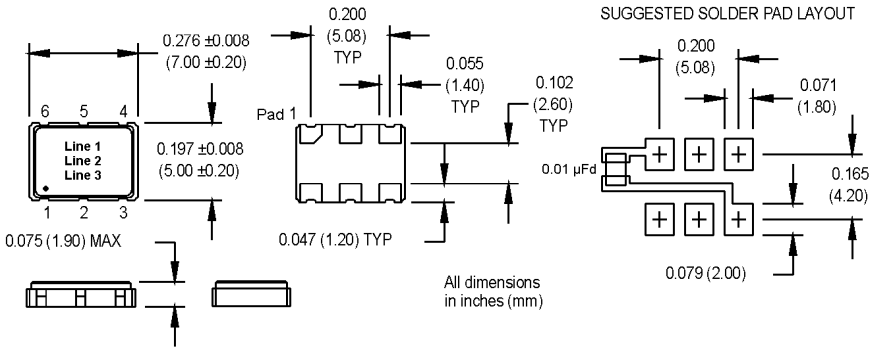
SPECIFICATION FOR 3.3V LVPECL SMT OSCILLATOR
MtronPTI P/N M2100S132

Mechanical, Marking, and Pin Out Information:

Part Marking	
Line 1	M2100S132
Line 2	200.000M
Line 3	yyww

Legend	
yy	Year
ww	Work week

Pin	Function
1	Tristate
2	N/C
3	Ground
4	Output
5	Complementary Output
6	$+V_{CC}$



Datasheet Revision Table:

Date	Rev.	Author	Details of Revision
07-14-20	A	MM	Original release.