





# SPECIFICATION FOR 2.5V LVPECL SMT TCXO MtronPTI P/N M6301S014

#### **Electrical Specifications:**

Parameter	Symbol	Min.	Тур.	Max.	Units	Conditions
Frequency of Operation	Fo		125.000000		MHz	
Frequency Tolerance		-1.0		+1.0	ppm	@ +25°C
		F	requency Sta	ability		
vs. Temperature	ΔF/F			4.6	ppm	(Max-Min)/2
vs. Aging		-3		+3	ppm	1 <sup>st</sup> year
		-1		+1	ppm	Per year thereafter.
			RF Outpu	ıt		
Output Type		Cor	nplementary LV	PECL		
Output Type			Compatible			
Output Load		50 Ω to (V <sub>CC</sub> – 2)			V	
Logic "1" Level Output	V <sub>OH</sub>	Vcc − 1.025			V	
Logic "0" Level Output	Vol			V <sub>cc</sub> – 1.62	V	
Symmetry (Duty Cycle)	T <sub>DC</sub>	45		55	%	Ref. at 50% of waveform
Rise/Fall Time	T <sub>R</sub> /T <sub>F</sub>			0.35	nS	From 20% to 80% Vcc
	S	upply Vo	Itage & Powe	r Consump	tion	
Operating Voltage	Vcc	2.375	2.5	2.625	V	
Operating Current	Icc			120	mA	

#### **Environmental Conditions:**

Parameter	Symbol	Min.	Тур.	Max.	Units	Conditions
Operating Temperature	TA	-55		+125	°C	
Storage Temperature	Ts	-55		+125	°C	
Shock	Per MIL-STD-202, Method 213, Condition C (100 g's, 6 ms duration, ½ sinewave)				duration, ½ sinewave)	
Vibration	Per MIL-STD-202, Method 201 & 204 (10 g's from 10-2000 Hz)		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 <sup>-8</sup> atm cc/s of helium)					
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.					

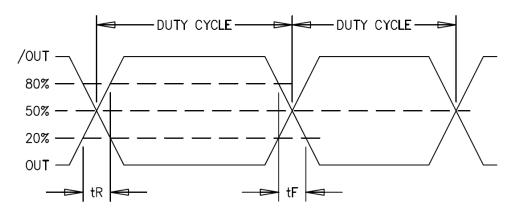




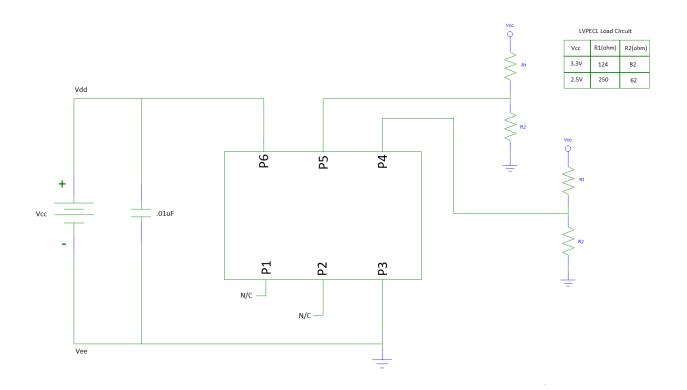


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## **Output Waveform:**



## **Typical Test Circuit & Load Circuit Diagrams:**









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## **Soldering Conditions:**

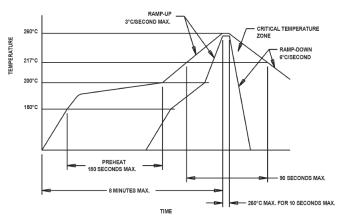
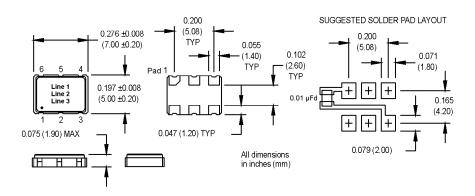


Figure 1

#### Mechanical, Marking, and Pin Out Information:



#### **Datasheet Revision Table:**

Date	Rev.	Author	Details of Revision
02/05/18	0	MM	Original release.