





# SPECIFICATION FOR 3.3V LVDS SMT TCXO MtronPTI P/N M6300S121

### **Electrical Specifications:**

Parameter	Symbol	Min.	Тур.	Max.	Units	Conditions
Frequency of Operation	Fo		150.000000		MHz	
Frequency Tolerance		-1.0		+1.0	ppm	@ +25°C
		F	requency Sta	bility		
vs. Temperature	ΔF/F			4.6	ppm	(Max-Min)/2
vo Aging		-3		+3	ppm	1 <sup>st</sup> year
vs. Aging		-1		+1	ppm	Per year thereafter.
			RF Outpu	t		
Output Type		Differential LVDS Compatible				
Output Load		100 Ω Differential			V	
Common Mode Output Voltage			1.2		V	
Differential Output Voltage		250	425	500	mV	LVDS Load
Symmetry (duty cycle)	T <sub>DC</sub>	45		55	%	Referenced to 1.2 V
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 Consum	nption	
Operating Voltage	V <sub>cc</sub>	3.135	3.3	3.465	V	
Operating Current	I <sub>cc</sub>			100	mA	

#### **Environmental Conditions:**

Parameter	Symbol	Min.	Тур.	Max.	Units	Conditions
Operating Temperature	T <sub>A</sub>	<b>-</b> 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)					
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)					
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.					

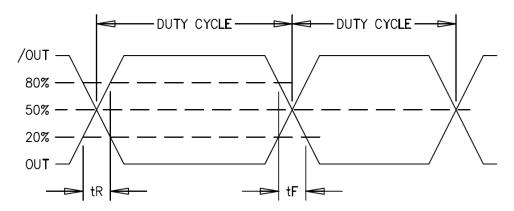




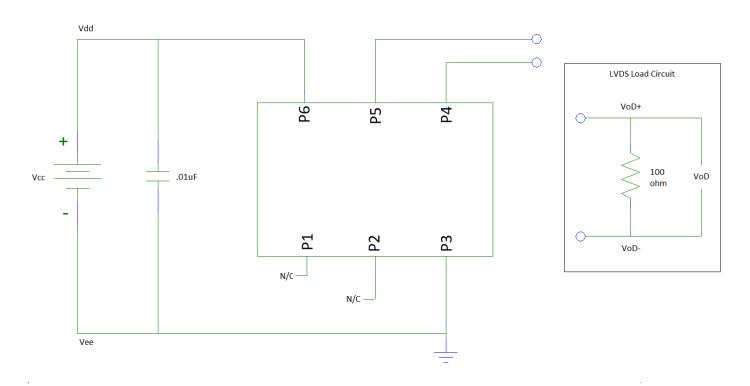


# SPECIFICATION FOR 3.3V LVDS SMT TCXO MtronPTI P/N M6300S121

## **Output Waveform:**



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









# SPECIFICATION FOR 3.3V LVDS SMT TCXO MtronPTI P/N M6300S121

### **Soldering Conditions:**

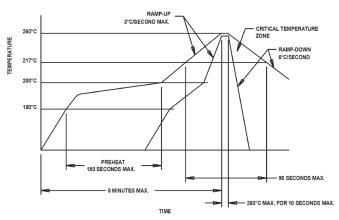
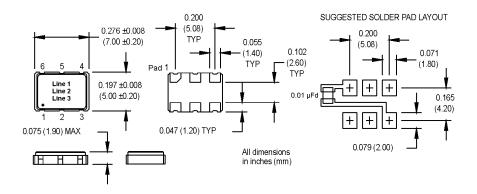


Figure 1

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



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

Date	Rev.	Author	Details of Revision					
10/18/18	0	MM	Original release					