





# SPECIFICATION FOR 1.8V LVDS SMT TCXO MtronPTI P/N M6302S020

### **Electrical Specifications:**

Parameter	Symbol	Min.	Тур.	Max.	Units	Conditions	
Frequency of Operation	Fo		280.000000		MHz		
Frequency Tolerance		-1.0		+1.0	ppm	@ +25°C	
Frequency Stability							
vs. Temperature	$\Delta$ F/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	t			
Output Type		Differe	ntial LVDS Com	patible			
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	$T_R/T_F$			0.35	nS	From 20% to 80% Vcc	
	S	upply Vo	Itage & Powe	r Consum	nption		
Operating Voltage	V <sub>cc</sub>	1.71	1.80	1.89	V		
Operating Current	I <sub>cc</sub>			100	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)						
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> at			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	ackage Type 6-pad 5.0 X 7.0 X 1.9 mm leadless ceramic. RoHS compliant.				nt.		

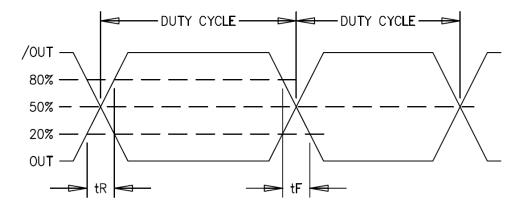




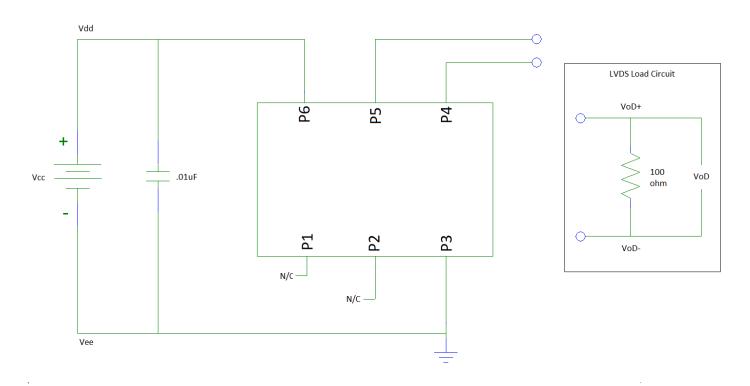


# SPECIFICATION FOR 1.8V LVDS SMT TCXO MtronPTI P/N M6302S020

## **Output Waveform:**



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









# SPECIFICATION FOR 1.8V LVDS SMT TCXO MtronPTI P/N M6302S020

### **Soldering Conditions:**

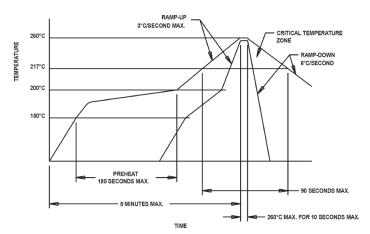
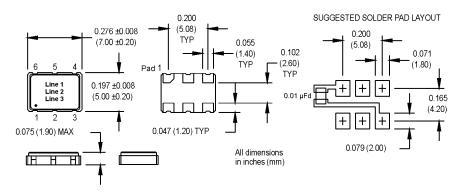


Figure 1

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



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

Date	Rev.	Author	Details of Revision		
04/25/18	0	MM	Original release.		