





## SPECIFICATION FOR 1.8V CMOS SMT TCXO MtronPTI P/N M6302S021

#### **Electrical Specifications:**

Parameter	Symbol	Min.	Тур.	Max.	Units	Conditions
Frequency of Operation	Fo		50.000000		MHz	
Frequency Tolerance		-1.0		+1.0	ppm	@ +25°C
		F	Frequency Sta	ability		
vs. Temperature	$\Delta$ F/F			4.6	ppm	(Max-Min)/2
vs. Aging		-3		+3	ppm	1 <sup>st</sup> year
vs. Aging		-1		+1	ppm	Per year thereafter.
			RF Outpu	It		
Output Type		HC	CMOS Compati	ble		
Output Load				15	pF	
Symmetry (duty cycle)	T <sub>DC</sub>	45		55	%	Ref. to 1/2 VDD
Logic "1" Level	Vон	80% Vdd			V	HCMOS load
Logic "0" Level	V <sub>OL</sub>			20% V <sub>DD</sub>	V	HCMOS load
Rise/Fall Time	T <sub>R</sub> /T <sub>F</sub>			6	ns	From 20% to 80% V <sub>DD</sub>
	S	upply Vo	Itage & Powe	r Consum	nption	
Operating Voltage	Vcc	1.71	1.80	1.89	V	
Operating Current	Icc			90	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-S	TD-202, M	ethod 201 & 20	4 (10 g's fro	om 10-2000	Hz)	
Thermal Shock	Per MIL-S	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)	vity Level MSL 1						
Solderability	Per EIAJ-STD-002						
Max. Soldering Conditions	oldering Conditions See Figure 1.						
Package Type 6-pad 5.0 X 7.0 X 1.9 mm leadless ceramic. RoHS compliant.				nt.			

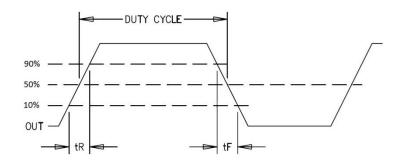




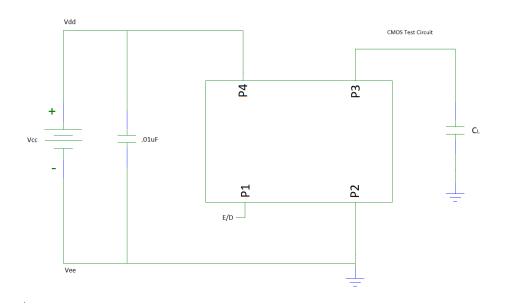


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# **Output Waveform:**



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



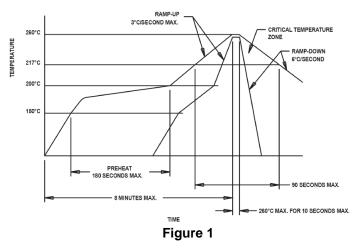




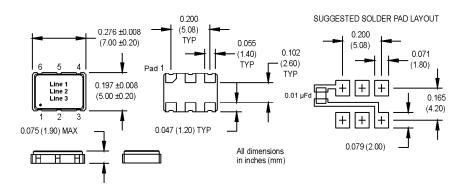


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## **Soldering Conditions:**



Mechanical, Marking, and Pin Out Information:



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

Date	Rev.	Author	Details of Revision			
05/07/18	0	MM	Original release.			