



## SPECIFICATION FOR 3.3V CMOS SMT TCXO

### MtronPTI P/N M6300S109

#### Electrical Specifications:

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Frequency of Operation	$F_O$		40.000000		MHz	
Frequency Tolerance		-1.0		+1.0	ppm	@ +25°C
<b>Frequency Stability</b>						
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.
<b>RF Output</b>						
Output Type		HCMOS Compatible				
Output Load				15	pF	
Symmetry (duty cycle)	$T_{DC}$	45		55	%	Ref. to $\frac{1}{2} V_{DD}$
Logic "1" Level	$V_{OH}$	80% $V_{DD}$			V	HCMOS load
Logic "0" Level	$V_{OL}$			20% $V_{DD}$	V	HCMOS load
Rise/Fall Time	$T_R/T_F$			6	ns	From 20% to 80% $V_{DD}$
<b>Supply Voltage &amp; Power Consumption</b>						
Operating Voltage	$V_{CC}$	3.135	3.300	3.465	V	
Operating Current	$I_{CC}$			90	mA	

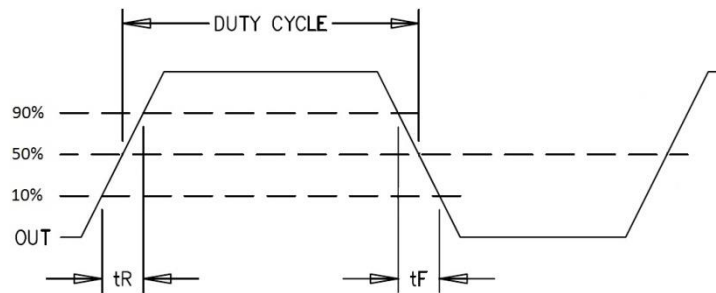
#### Environmental Conditions:

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Operating Temperature	$T_A$	-55		+125	°C	
Storage Temperature	$T_S$	-55		+125	°C	
Shock	Per MIL-STD-202, Method 213, Condition C (100 g's, 6 ms duration, $\frac{1}{2}$ 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 ( $1 \times 10^{-8}$ 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.					

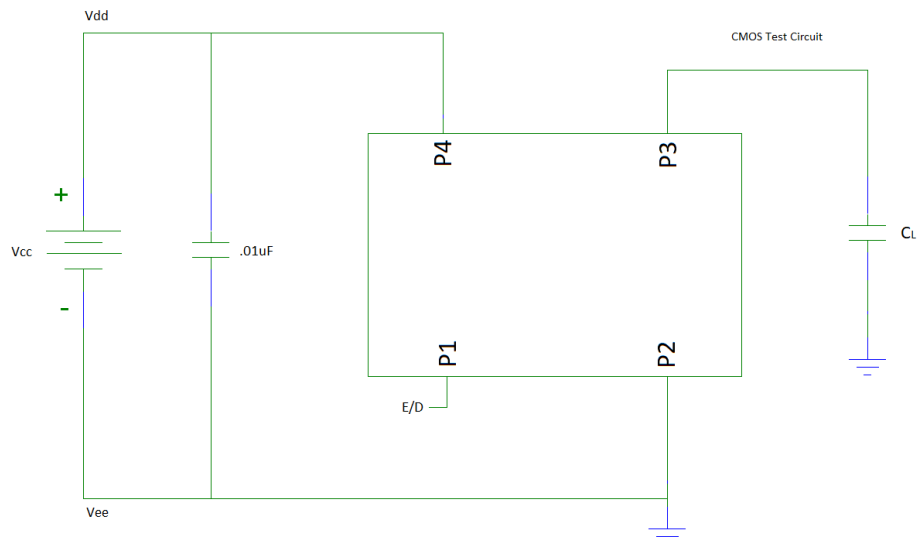


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### Output Waveform:



### Typical Test Circuit & Load Circuit Diagrams:





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### Soldering Conditions:

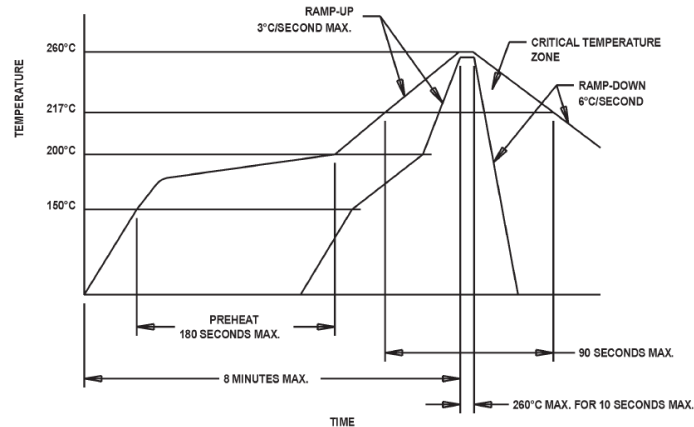
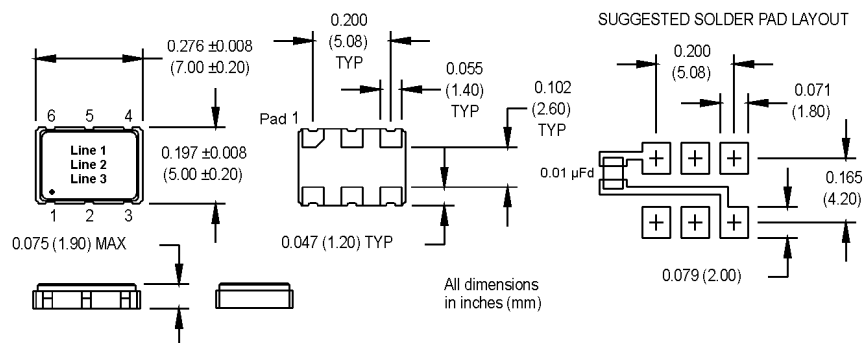


Figure 1

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



### Datasheet Revision Table:

Date	Rev.	Author	Details of Revision
06/15/18	0	MM	Original release.