





## SPECIFICATION FOR RoHS 6 COMPLIANT HCMOS TCXO MtronPTI P/N M6300S085

### **Electrical Specifications:**

Parameter	Symbol	Min.	Тур.	Max.	Units	Conditions
Frequency of Operation	Fo		50.000000		MHz	
Initial Accuracy		-1		+1	ppm	@ +25°C
			Frequency	Stability		
vs. Temperature	∆F/F			4.6	ppm	Over operating temperature range (F <sub>Max</sub> - F <sub>Min</sub> )/2
Frequency Vs. Aging		-3		+3	ppm	First year.
		-1		+1	ppm	Per year thereafter.
Frequency Vs. Supply			± 0.4		ppm	5% supply variation
Frequency Vs. Load			± 0.2		ppm	5% load variation
			RF Ou	tput		
Output Type			HCMOS			
Output Load			15		рF	
Symmetry (duty cycle)	T <sub>DC</sub>	45		55	%	1/2 V <sub>DD</sub>
Logic "1" Level	V <sub>OH</sub>	90% V <sub>CC</sub>			V	HCMOS load
Logic "0" Level	Vol			10% V <sub>CC</sub>	V	HCMOS load
Rise/Fall Time	T <sub>R</sub> /T <sub>F</sub>			3	nS	From 10% to 90% V <sub>CC</sub>
		Supply	Voltage & Po	wer Consu	mption	
Operating Voltage	Vcc	3.135	3.3	3.465	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)					
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	MSL 1					
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. M6300-Series					

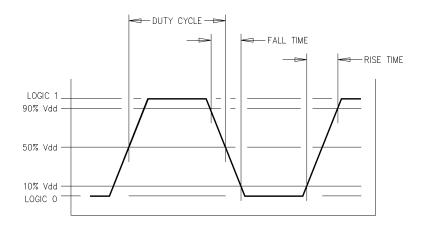




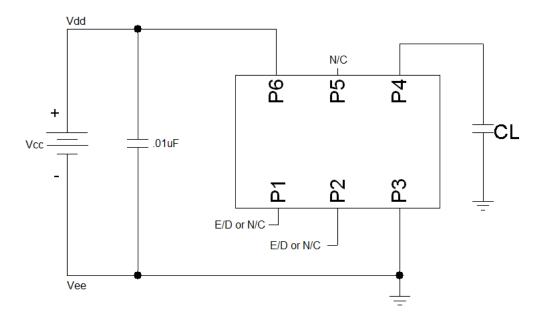


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# **Output Waveform:**



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



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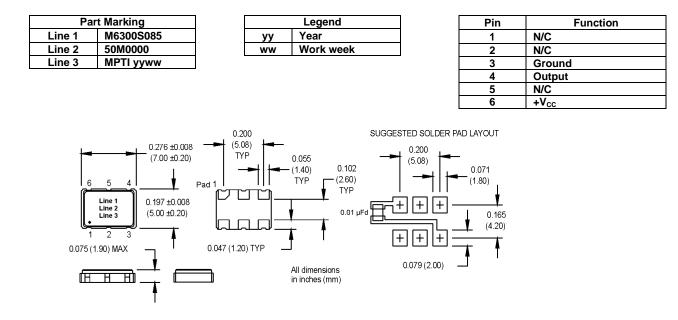




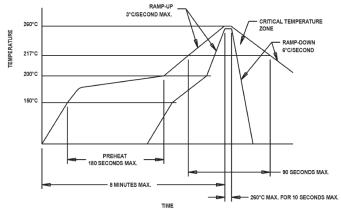


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### Mechanical, Marking, and Pin Out Information:



## **Soldering Conditions:**



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

Date	Rev.	Author	Details of Revision	
07/20/15	0	MM	Original release.	