1703 E. Highway 50 Yankton, SD 57078 USA
Phone: 800-762-8800 or 605-665-9321 Fax: 605-665-1709
Website: www.mtronpti.com

SPECIFICATION FOR RoHS 6 COMPLIANT HCMOS TCXO
MtronPTI P/N M6300S089

Electrical Specifications:

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Frequency of Operation	F_O		100.000000		MHz	
Initial Accuracy		-1		+1	ppm	@ +25°C
Frequency Stability						
vs. Temperature	ΔF/F			1.0	ppm	Over operating temp range (F_{Max} - F_{Min})/2
vs. Aging		-3		+3	ppm	1st year
		-2		+2		Thereafter (per year)
RF Output						
Output Type			HCMOS			
Output Load			15		*pF*	
Symmetry (duty cycle)	T_{DC}	45		55	%	½ V_{DD}
Logic "1" Level	V_{OH}	90% V_{DD}			V	HCMOS load
Logic "0" Level	V_{OL}			10% V_{DD}	V	HCMOS load
Rise/Fall Time	T_R/T_F			3	nS	From 10% to 90% V_{DD}
SSB Phase Noise						
Typical Under Static Conditions			-64		dBc/Hz	@ 10Hz
			-97			@ 100Hz
			-121			@ 1kHz
			-129			@ 10kHz
			-135			@ 100kHz
			-143			@ 1 MHz
			-151			@ 10 MHz
			-153			@ 20 MHz
Supply Voltage & Power Consumption						
Operating Voltage	V_{CC}	3.135	3.3	3.465	V	
Operating Current	I_{CC}			90	mA	
Temperature Range						
Operating Temperature	TA	-40		+85	°C	
Storage Temperature	TS	-55		+125	°C	

Environmental Conditions:

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^{-8} atm cc/s of helium)
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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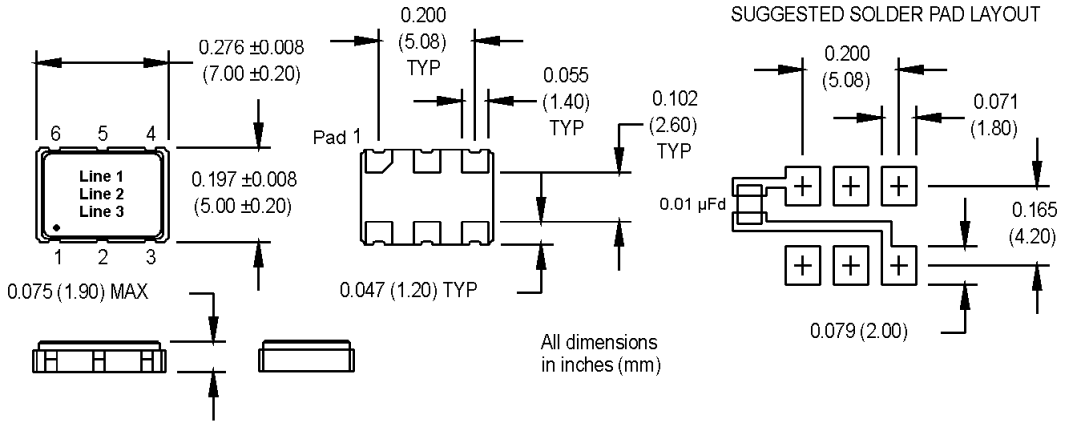
Mechanical, Marking, and Pin Out Information:

Part Marking	
Line 1	WU2T33AQ
Line 2	100.0000MHz
Line 3	yyww

Legend	
yy	Year
ww	Work week

Pin	Function
1	N/C
2	N/C
3	Ground
4	Output
5	N/C
6	$+V_{CC}$



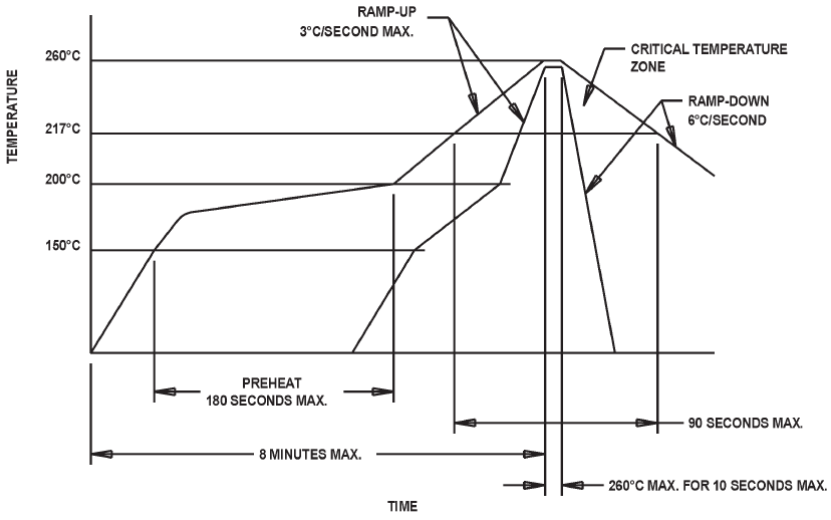


Figure 1

Datasheet Revision Table:

Date	Rev.	Author	Details of Revision
07/19/16	0	MM	Original release.