...when timing matters

SPECIFICATION FOR 3.3V CMOS Gull-Wing TCXO
MtronPTI P/N M6300S128

Electrical Specifications:

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Frequency of Operation	F_O		25.000000		MHz	
Initial Tolerance		-1		+1	ppm	@ +25°C
Frequency Stability						
vs. Temperature	ΔF/F			4.6	ppm	(Max-Min)/2
RF Output						
Output Type		HCMOS Compatible				
Output Load				15	pF	
Symmetry (duty cycle)	T_{DC}	45		55	%	Ref. to ½ 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}
Additional Specifications						
Tristate Enable Logic		80%V_{DD} or N/C			V	Pad 1. Clock Signal Output
Tristate Disable Logic				0.35	V	Pad 1. Output to High-Z
Start-up Time				10	*ms*	
Supply Voltage & Power Consumption						
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, 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 leadless ceramic package with (4) Gullwing Leads attached.					

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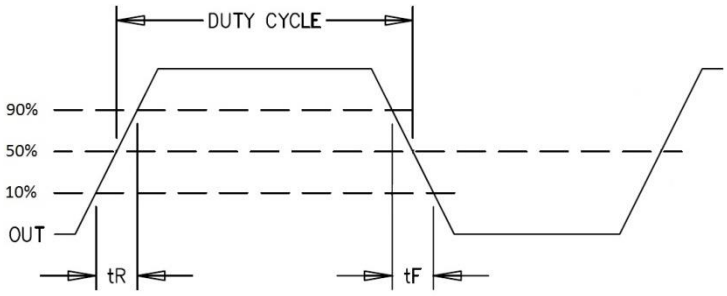
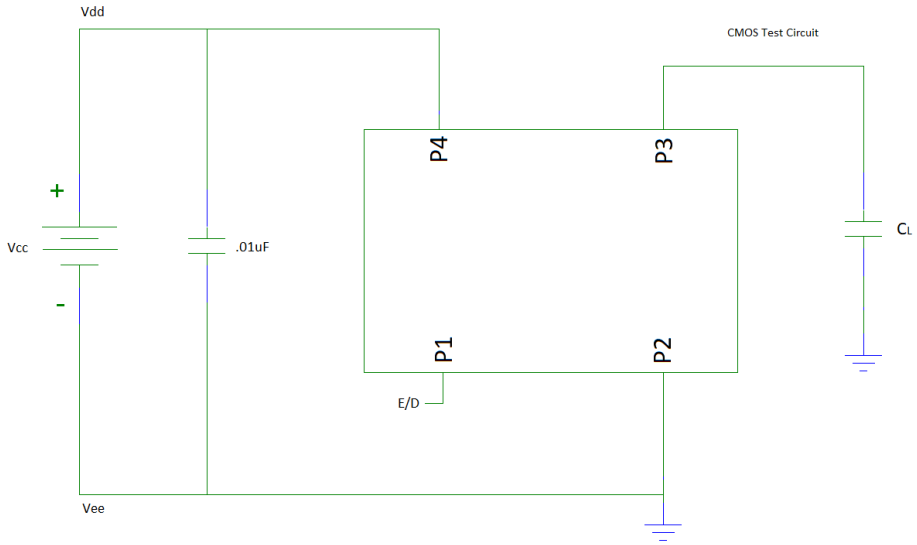
Output Waveform:



Typical Test Circuit & Load Circuit Diagrams:



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Soldering Conditions:

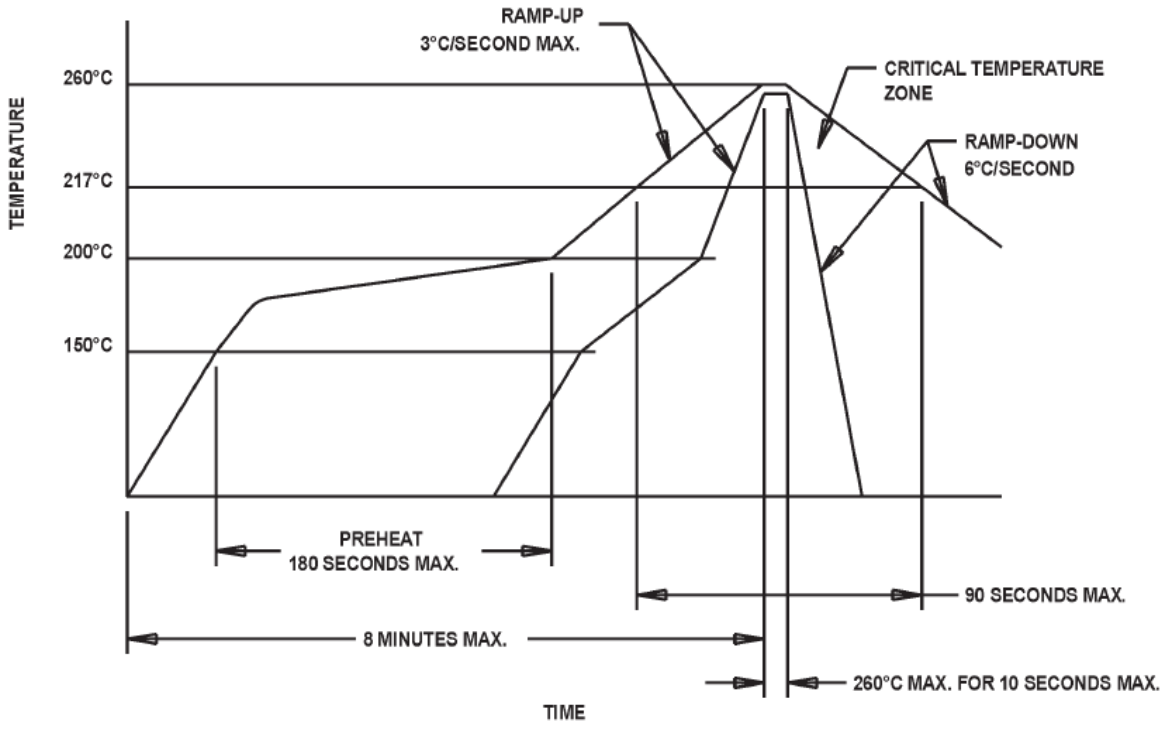

Figure 1

SPECIFICATION FOR 3.3V CMOS Gull-Wing TCXO
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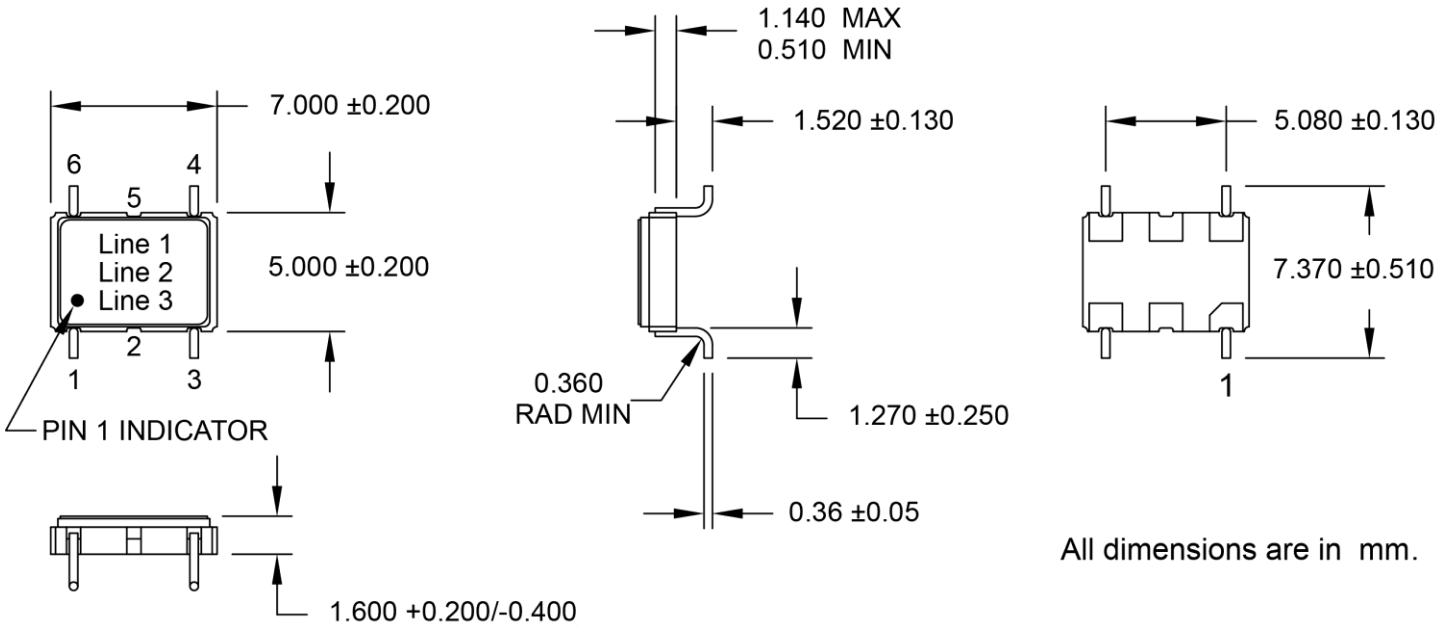
Mechanical, Marking, and Pin Out Information:

Part Marking	
Line 1	M6300S128
Line 2	25M000
Line 3	yyww

Legend	
yy	Year
ww	Work week

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



Datasheet Revision Table:

Date	Rev.	Author	Details of Revision
08-21-19	A	BRR	Original release.
11-25-19	B	BRR	Outline Drawing updated with Gull Wing Leads; Tristate disable logic revised; Part Marking updated
05-18-20	C	MM	Updated lead configuration.
08/03/21	D	MM	Added customer part number
08/11/21	E	MM	Updated mechanical dimensions.
08/24/21	F	MM	Updated mechanical dimensions.