



SPECIFICATION FOR SMT TCXO

MtronPTI P/N: M6300S026

Electrical Specifications:

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Frequency of Operation	F _O		64.000000		MHz	V _c = +1.35 V @ +25°C
Frequency Tolerance		-1.0		+1.0	ppm	@ + 25°C
Frequency Stability	ΔF/F	-4.6		+4.6	ppm	(Max-Min)/2
Frequency Vs. Aging		-3		+3	ppm	First year.
		-1		+1	ppm	Per year thereafter.
Freq. Deviation Slope				4	ppm/°C	-55°C to +125°C
Frequency Vs. Reflow			± 0.75		ppm	Two reflows max.
Frequency Vs. Supply			± 0.4		ppm	5% supply variation
Frequency Vs. Load			± 0.2		ppm	5% load variation
Operating Temperature	T _A	-55		+125	°C	
Storage Temperature	T _S	-55		+125	°C	
Operating Voltage	V _{DD}	3.135	3.3	3.465	V	
Operating Current	I _{DD}			90	mA	
Output Type		HCMOS Compatible				
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			6	ns	From 20% to 80% V _{DD}
Phase Noise			-70		dBc/Hz	10 Hz offset
			-95		dBc/Hz	100 Hz offset
			-120		dBc/Hz	1kHz offset
			-130		dBc/Hz	10 kHz offset
			-132		dBc/Hz	100 kHz offset

Environmental & Mechanical Requirements:

Mechanical 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 Cycle	Per MIL-STD-883, Method 1010, B (-55°C to 125°C, 15 min. dwell, 10 cycles)
Thermal Shock	Per MIL-STD-883, Method 1011, Condition A
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 solder profile, Figure 1
Package Type	6-pad 5 X 7 X 1.9 mm leadless ceramic. RoHS compliant.



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Dimensions, Pin Out, & Marking Information:

Pad	Function
1	N/C
2	N/C
3	Ground
4	Output
5	N/C
6	+V _{DD}

Part Marking	
Line 1	M6300S026
Line 2	64M000
Line 3	M yywwvv

Legend	
yy	Year
ww	Work week
vv	Factory code

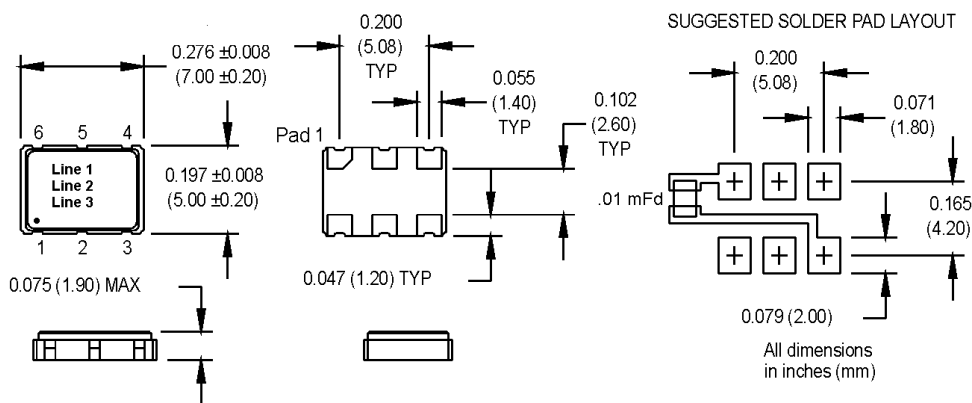
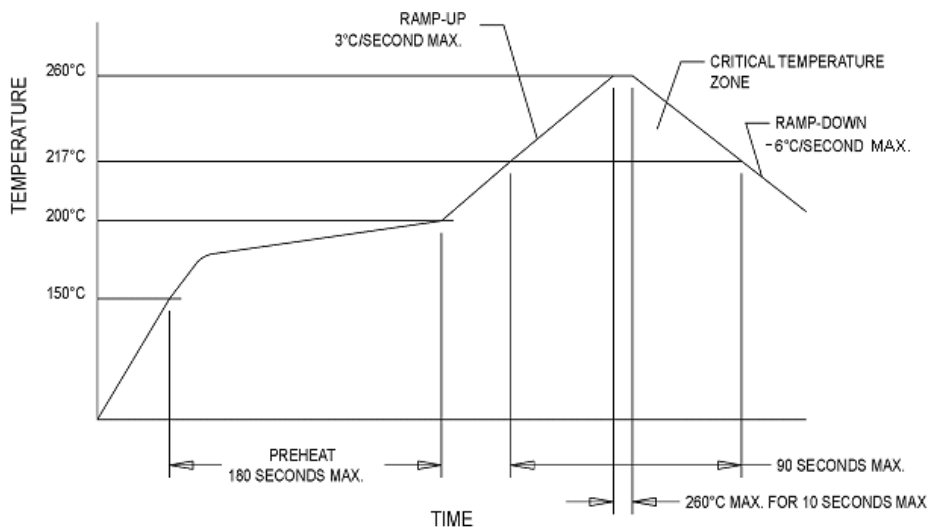


Figure 1



Datasheet Revision Table:

Date	Rev.	Author	Details of Revision
8/17/09	0	WNJ	Original release.
8/27/09	A	WNJ	Added Frequency Tolerance at +25°C spec.
4/11/11	B	MM	Changed Slope specification to.