

SPECIFICATION FOR HCMOS COMPATIBLE SMT OSCILLATOR MtronPTI P/N M2532S100

Electrical Specifications:

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Frequency of Operation	F _O		8.000000		MHz	
Frequency Stability	ΔF/F	-50		+50	ppm	
Operating Temperature	T _A	-40		+85	°C	
Storage Temperature	T _S	-55		+125	°C	
Operating Voltage	V _{DD}	2.97	3.3	3.63	V	
Operating Current	I _{DD}			20	mA	
Output Type		HCMOS Compatible				
Output Load				15	pF	
Symmetry (duty cycle)	T _{DC}	40		60	%	Ref to 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			10	nS	From 10% to 90% V _{DD}
Start-Up Time			4	10	mS	
Tri-State Function		Logic "1" or floating Logic "0"				Pad 1: Enables output. Pad 1: Disables output to a high impedance.

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)
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	4-pad 2.5 X 3.2 X 1.1 mm leadless ceramic. RoHS compliant.

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Dimensions, Marking, and Pin Out Information:

Pad	Function
1	Tri-state
2	Ground
3	Output
4	+V _{DD}

Part Marking	
Line 1	8M000
Line 2	M ymv

Legend	
y	Last digit of year
m	Letter code for month
v	Factory code

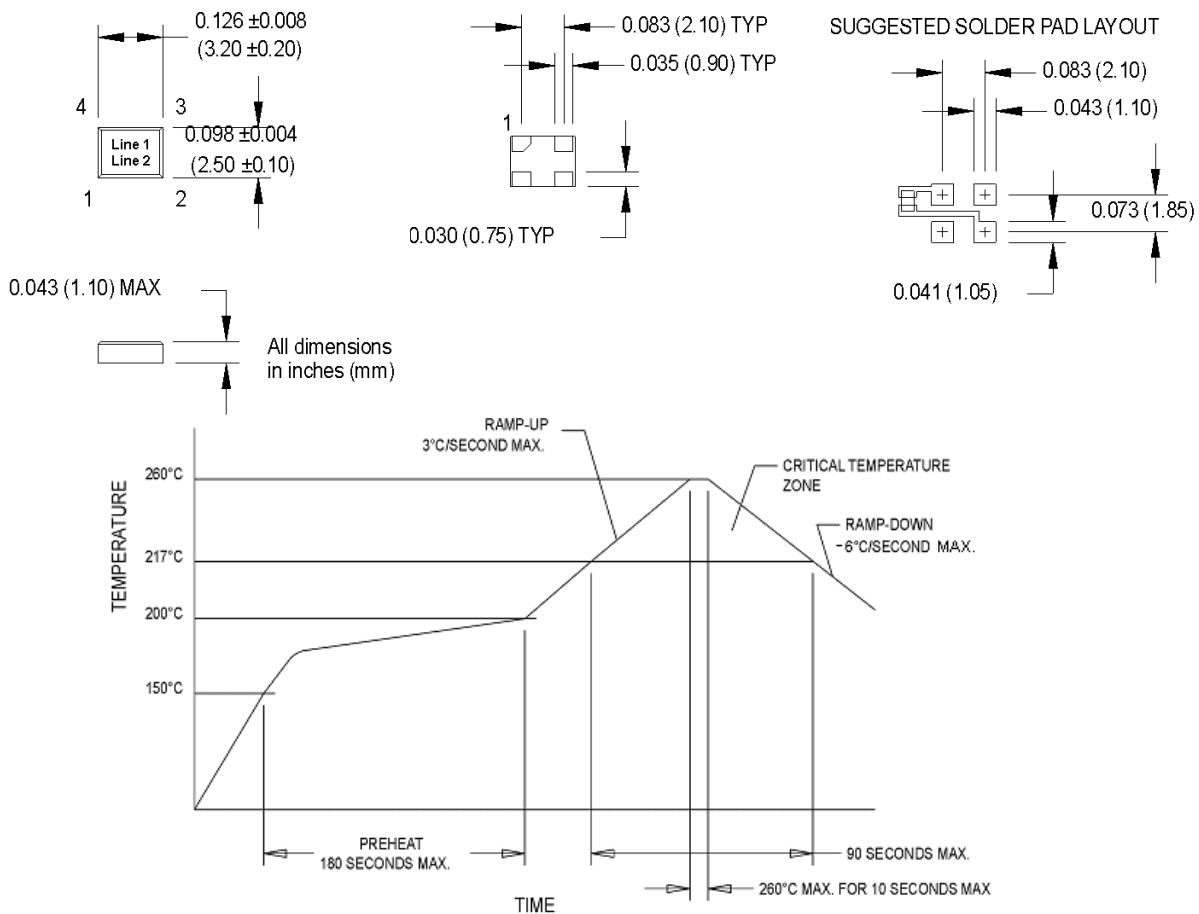


Figure 1

DATA SHEET REVISION TABLE:

Date	Rev.	Author	Details of Revision
5/28/13	0	MM	Original release.
12/10/13	A	MM	Updated supply voltage and part marking.
05/08/14	B	MM	Corrected customer part number.