

SPECIFICATION FOR RoHS 6 COMPLIANT HCMOS SMT OSCILLATOR MtronPTI Part Number M2002S203

I. General & Electrical Specifications:

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Frequency of Operation	F ₀		76.284000		MHz	
Frequency Stability						
vs. Temperature	ΔF/F	-50		+50	ppm	Includes initial tolerance at +25°C, deviation over operating temperature, voltage & load variations, shock, vibration, and aging.
RF Output						
Output Type		HCMOS/TTL Compatible				
Output Load				15	pF	
Symmetry (duty cycle)	T _{DC}	45	50	55	%	Ref to ½ V _{DD}
Logic "1" Level	V _{OH}	90% V _{DD}			V	
Logic "0" Level	V _{OL}			0.4	V	
Rise/Fall Time	T _R /T _F			4	ns	20% to 80% V _{DD} HCMOS load
Startup Time				10	ms	
Enable/Disable Logic		Logic "high" or "floating"				Pad 1: Output Enabled
		Logic "low"				Pad 1: Output Disabled to high-Z
Supply Voltage & Power Consumption						
Operating Voltage	V _{DD}	2.97	3.3	3.63	V	
Operating Current	I _{DD}			30	mA	

II. Environmental & Mechanical Requirements:

Operating Temperature	T _A	-40		+85	°C	
Storage Temperature	T _S	-55		+125	°C	
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)					
Hermeticity	Per MIL-STD-202, Method 112 (1 x 10 ⁻⁸ atm cc/s of Helium)					
Max. Soldering Conditions	See solder profile, Figure 1					
Package Type	5.0 x 7.0 x 1.7 mm, 4-pad Ceramic Leadless Chip Carrier (M2 type)					

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III. Dimensions, Marking, and Pin Out Information:

Pad	Function
1	Enable/Disable
2	Ground
3	Output
4	+V _{DD}

Part Marking	
Line 1	M2002S203
Line 2	76M284
Line 3	M yywwvv

Legend	
yy	Year
ww	Work week
vv	Factory code

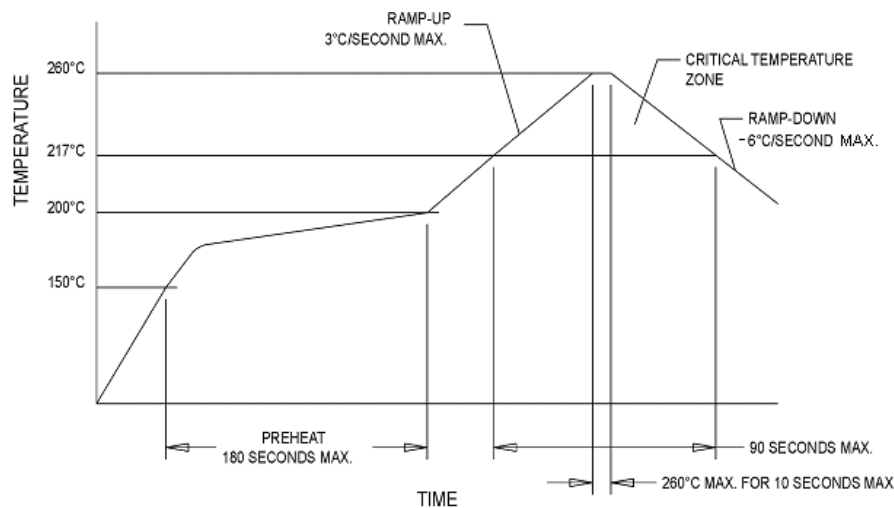
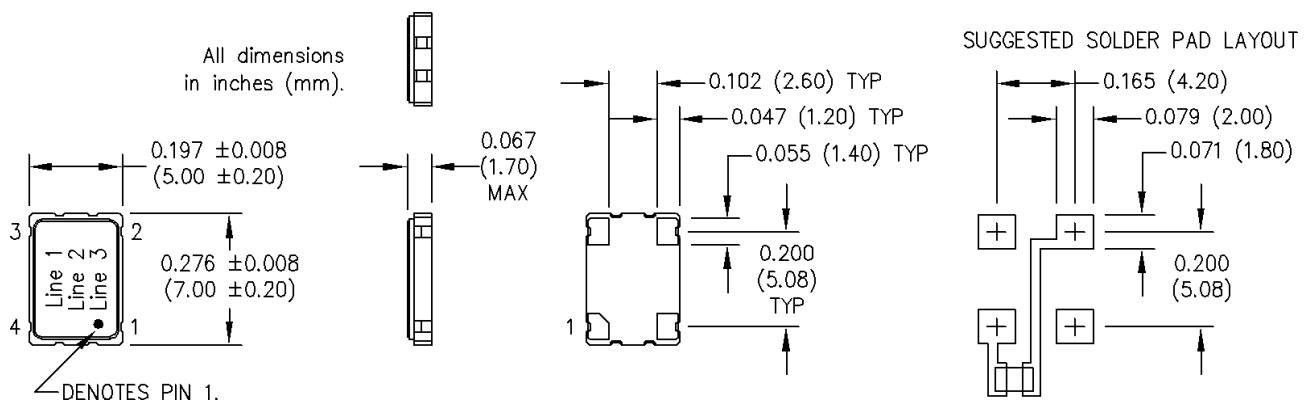


Figure 1

IV. Datasheet Revision Table:

Date	Rev.	Author	Details of Revision
12/06/04	0	WNJ	Original release
02/17/17	A	MM	Datasheet format update