MtronPTI ...when timing matters

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 SMT OSCILLATOR
MtronPTI Part Number M2002T279

I. General & Electrical Specifications:

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Frequency of Operation	F_O		35.328000		MHz	
Frequency Stability						
vs. Temperature	ΔF/F	-30		+30	ppm	Includes initial tolerance @ +25°C and deviation over the operating temperature range
Aging		-3		+3	ppm	1st year
		-2		+2	ppm	Thereafter (per year)
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	HCMOS load
Logic "0" Level	V_{OL}			10% V_{DD}	V	HCMOS load
Rise/Fall Time	T_R/T_F			5	ns	10% to 90% V_{DD} HCMOS load
Start-Up Time				10	ms	
Tristate Function		80% V_{DD} or N/C			V	Pad 1: Output Enabled
				20% V_{DD}	V	Pad 1: Output Disabled to high-Z
Supply Voltage & Power Consumption						
Operating Voltage	V_{DD}	3.0	3.3	3.6	V	
Operating Current	I_{DD}			20	mA	
Other Parameters						
Phase Jitter (RMS)	ΦJ		0.130	0.200	pS	12KHz to 5MHz

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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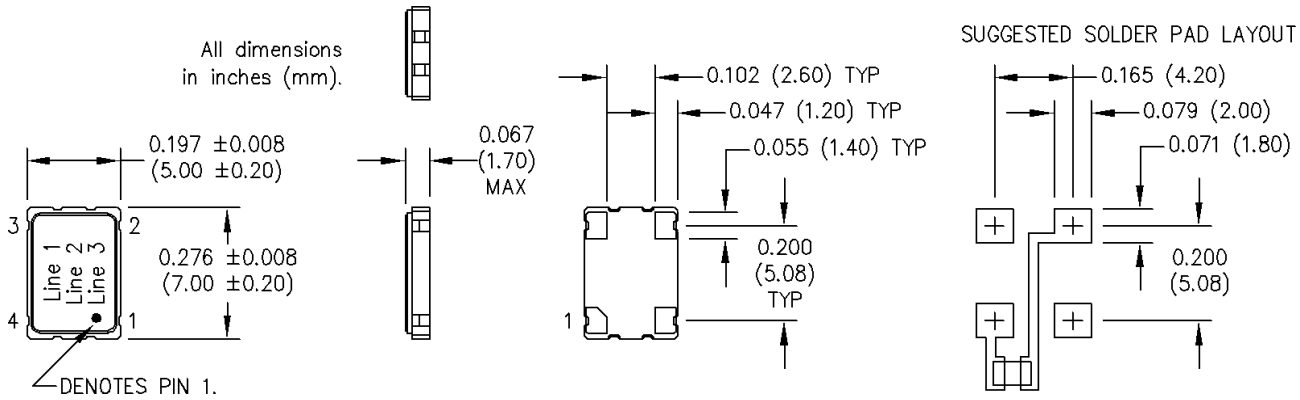
III. Dimensions, Marking, and Pin Out Information:

Pad	Function
1	Tristate
2	Ground
3	Output
4	$+V_{DD}$

Part Marking	
Line 1	M2002T279
Line 2	35M3280
Line 3	M yy ww vv

Legend	
yy	Year
ww	Work week
vv	Factory code



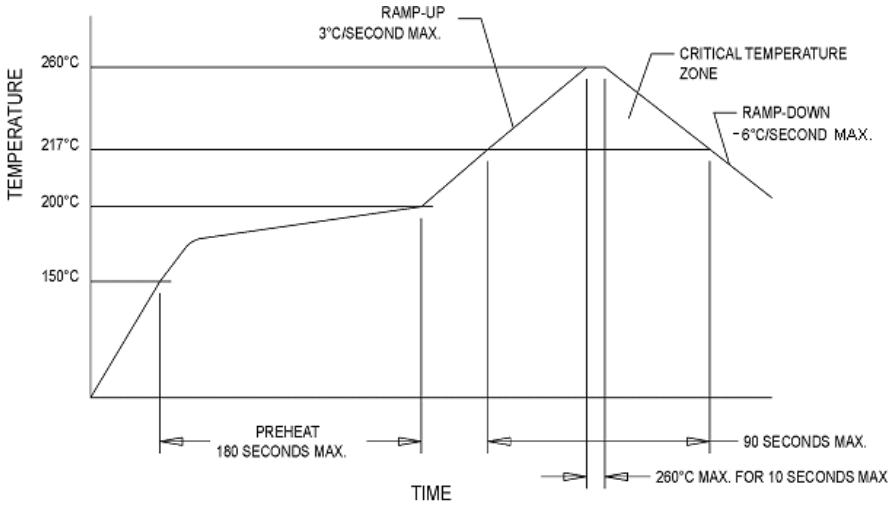


Figure 1

IV. Datasheet Revision Table:

Date	Rev.	Author	Details of Revision
08/26/16	0	MM	Original release