

SPECIFICATION FOR RoHS 6 COMPLIANT HCMOS SMT OSCILLATOR

MtronPTI P/N: M2532S125

I. General & Electrical Specifications:

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Frequency of Operation	F _O		50.000000		MHz	
Frequency Stability						
Frequency Stability	ΔF/F	-50		+50	ppm	Calibration @ +25 °C and Deviation Over Operating Temperature Range.
Aging			±3		ppm	first year
			±2		ppm	per year after first year
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}	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}
Start-Up Time				10	ms	
Tristate Logic		Logic "1" (70% V _{DD} min) or Open			V	Pad 1: Output Enabled
		Logic "0" (30% V _{DD} max)			V	Pad 1: Output Disabled to high-Z
Output Disable Time				100	ns	
Supply Voltage & Power Consumption						
Operating Voltage	V _{DD}	2.97	3.30	3.63	V	
Operating Current	I _{DD}			20	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)					
Moisture Sensitivity Level (MSL)	MSL 1					
Solderability	Per EIAJ-STD-002					
Max. Soldering Conditions	See solder profile, Figure 1					
Package Type	4-pad 2.5 X 3.2 X 1.2 mm leadless ceramic. RoHS compliant.					

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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	50M000
Line 2	M y m v

Legend	
y	Last digit of year
m	Month letter code
v	Factory code

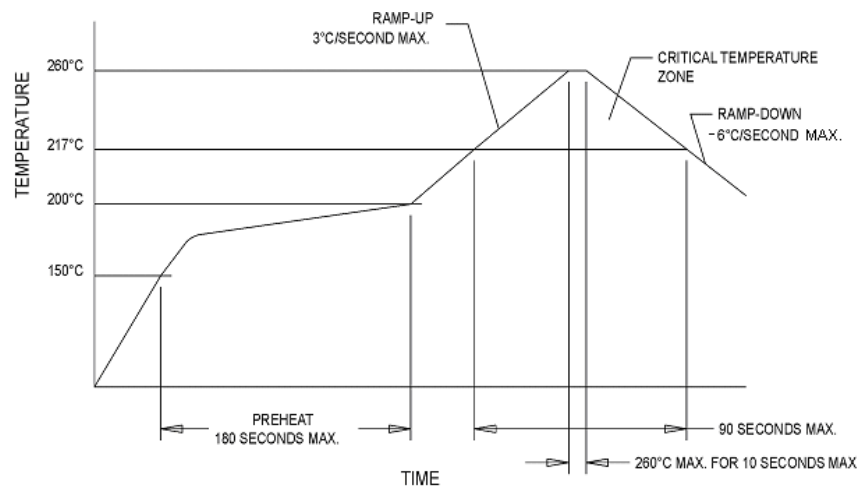
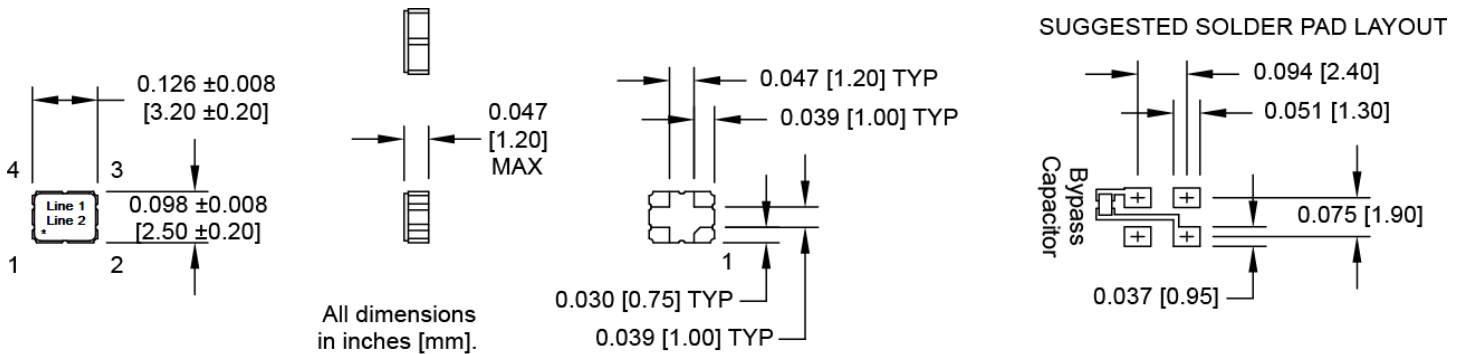


Figure 1

IV. Datasheet Revision Table:

Date	Rev.	Author	Details of Revision
12/14/17	0	MM	Original release