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 HIGH OPERATING TEMPERAURE SMT OSCILLATOR
MtronPTI P/N M2052S004

Electrical Specifications:

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Frequency Range	F_O		7.500000		MHz	
Frequency Stability	ΔF/F	-250		+250	ppm	Includes initial calibration tolerance and deviation over operating temperature.
Operating Temperature	T_A	-40		+200	°C	
Storage Temperature	T_S	-55		+200	°C	
Operating Voltage	V_{DD}	TBD	1.8	TBD	V	
Operating Current	I_{DD}		TBD		mA	
Output Type		HCMOS/TTL Compatible				
Output Load				15/2	pF/TTL	
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			TBD	nS	From 10% to 90% V_{DD}. Frequency dependent.
Random Jitter			5	12	pS	RMS (1-Sigma)
Tri-State Function		Logic "1", or floating, Enables Output Logic "0" Disables Output to a High-Z				Pad 1

Environmental & Mechanical Requirements:

Mechanical Shock	Per MIL-STD-202, Method 213, Condition E (1000 g's, 0.5 ms duration, ½ sinewave)
Vibration	Per MIL-STD-202, Method 204, Condition D (10-2000 Hz at 20 g's)
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	5 X 7 X 1.9 mm leadless ceramic. RoHS compliant.

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

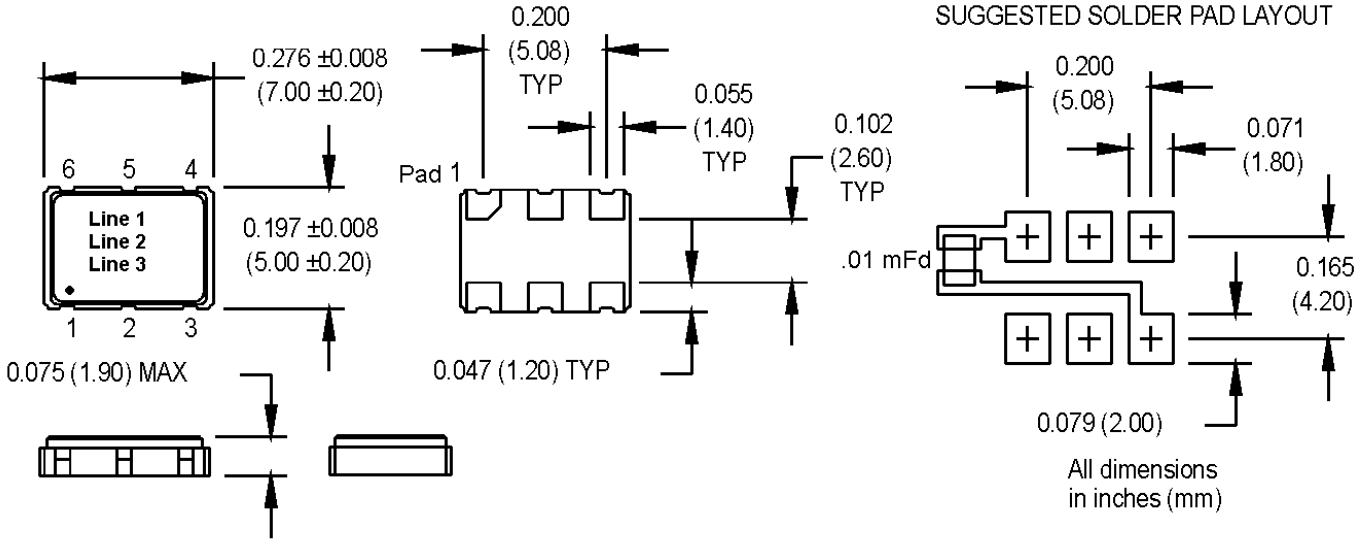
SPECIFICATION FOR HIGH OPERATING TEMPERAURE SMT OSCILLATOR
MtronPTI P/N M2052S004

Dimensions, Marking, and Pin Out Information:

Pad	Function
1	Tri-state
2	No Internal Connection
3	Ground
4	Output
5	No Internal Connection
6	$+V_{DD}$

Part Marking	
Line 1	M2052S004
Line 2	7M5000
Line 3	M yyww

Legend	
yy	Year
ww	Work week



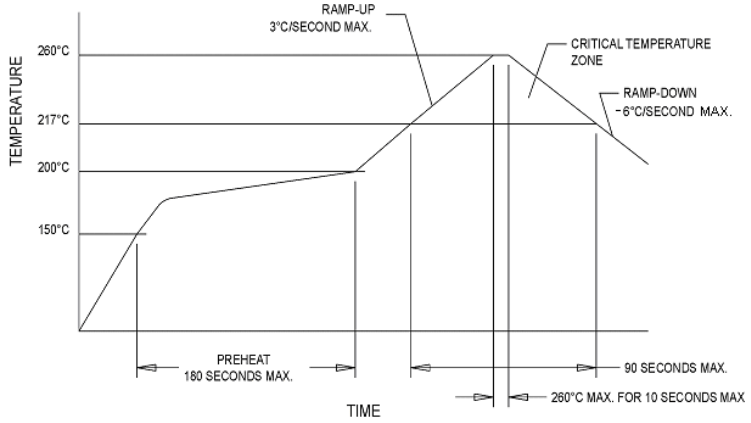


Figure 1

DATA SHEET REVISION TABLE:

Date	Rev.	Author	Details of Revision
2/21/13	0	MM	Original release.