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 an HCMOS Compatible SMT Oscillator
MtronPTI P/N M2532S088

Electrical Specifications:

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Frequency of Operation	F_O		14.745600		MHz	
Frequency Stability		-500		+500	ppm	For all causes over 10-years
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			10	*ns*	From 10% to 90% Vdd
Additional Specifications						
Random Jitter			4	10	*ps* RMS	1 Sigma
Start-up Time	T_{SU}			10	*ms*	
Tri-State Function		Logic "1" or floating, Enables output. Logic "0" disables output to a high impedance.				Pad 1
Supply Voltage & Current						
Operating Voltage	V_{DD}	2.97	3.3	3.63	V	
Operating Current	I_{DD}			15	*mA*	
Absolute Maximum Supply Voltage	AMR			4	V	
Temperature Ranges						
Operating Temperature	TA	-40		+115	*°C*	
Storage Temperature	TS	-55		+125	*°C*	

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 1.3 mm leadless ceramic. RoHS compliant.

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Dimensions, Marking and Pin Out Information:

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

Part Marking	
Line 1	14.7456M
Line 2	M (yw)

Legend	
y	Year
w	Work Week

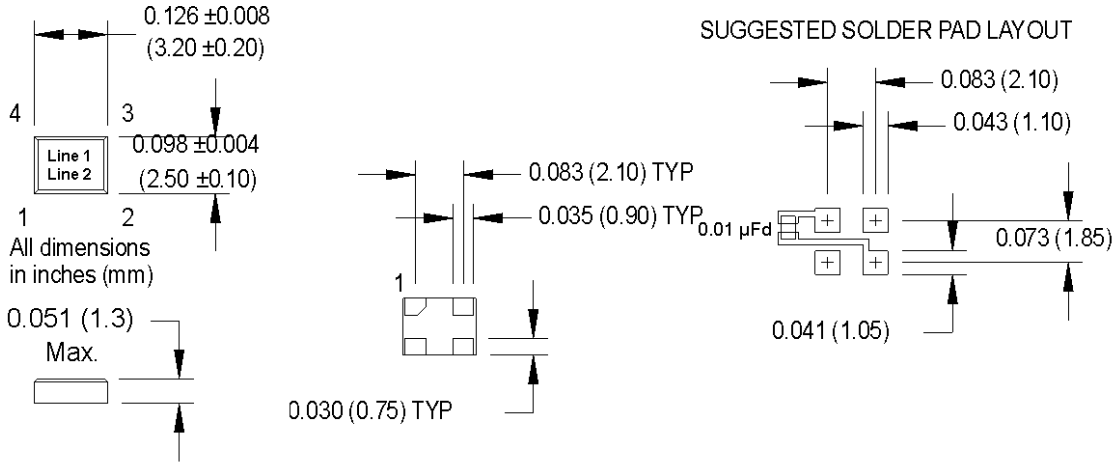

Figure 1