

# MTH Series 5 x 3.2 Ceramic SMD Oscillator



- Low Profile SMD Package
- Hermetically Sealed
- Standby & Tristate Available
- Wide Frequency Range



Frequency Range	1.000MHZ to 160.000MHZ	1.000MHZ to 160.000MHZ &	1.000MHZ to 160.000MHZ &	1.000MHZ to 106.250MHZ
Temperature Stability*	(See Part Number Guide for Options)			
Aging (+25°C ±3°C)	±3ppm, ±5ppm for first year			
Operating Temperature Range	(See Part Number Guide for Options)			
Storage Temperature Range	-55°C to +125°C			
Supply Voltage (±10%)	+1.80 VDC	+2.50 VDC	+3.30 VDC	+5.00 VDC
Supply Current	1.000MHZ to 34.999MHZ	8mA	10mA	16mA
	35.000MHZ to 60.000MHZ	10mA	20mA	25mA
	60.001MHZ to 99.999MHZ	25mA	30mA	40mA
	100.000MHZ to 106.250MHZ	35mA	40mA	50mA
106.251MHZ to 160.000MHZ	35mA	40mA	50mA	NA
Output Type	HCMOS			
Symmetry (50% of waveform)	40%/60% (45%/55% option)			
Rise/Fall Time (10% to 90% of Supply Voltage)	10nS max			
Load	15pF			
Start-up Time	10mSec max			
Period Jitter: pk-pk	±100ps max			
Period Jitter: One Sigma	±25ps max			
Phase Jitter (12KHZ to 20MHZ)	1ps max			
* Inclusive of Temperature., Load and Voltage				
Pin 1 Function				
Tri-state Operation	Vih = 70% of Vdd min to Enable Output Vil = 30% max or grounded to Disable Output (High Impedance)			
Standby Current	10µA max			

## Mechanical & Environmental Detail

Humidity	85% RH, 85°C, 48 Hours
Hermetic Seal	Leak Rate 2 X 10 <sup>-8</sup> ATM-cm <sup>3</sup> /sec max
Solderability	MIL-STD-202G, Method 208
Reflow Solderability	260°C for 10 seconds
Vibration	MIL-STD-202G, Method 204 35G, 50 to 2000 Hz
Shock	MIL-STD-202G, Method 203 Test Cond E, 1000G's, ½ Sinewave
MIL-STD-883	Available with Level B Screening

## Marking Detail

Line 1 = MXXXXX		
M	=	MMD
XXXXX	=	Frequency in MHZ
Line 2 = SYWWL		
S	=	Internal Code
YYWW	=	4 Digit Date Code (Year / Week)
L	=	Denotes RoHS Compliant
Line 3 = XXXXX		
Internal use only		
May vary with lots		
Black dot to denote Pin 1		



**MMD Monitor/Quartztek**  
 30400 Esperanza, Rancho Santa Margarita, CA, 92688  
 Phone: (949) 709-5075, Fax: (949) 709-3536, [www.mmdcomp.com](http://www.mmdcomp.com)  
 Sales@mmdcomp.com



