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	25mA
	35.000MHZ to 60.000MHZ	10mA	20mA	25mA	50mA
	60.001MHZ to 99.999MHZ	25mA	30mA	40mA	60mA
	100.000MHZ to 106.250MHZ	35mA	40mA	50mA	80mA
	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^{-8} ATM-cm^3/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

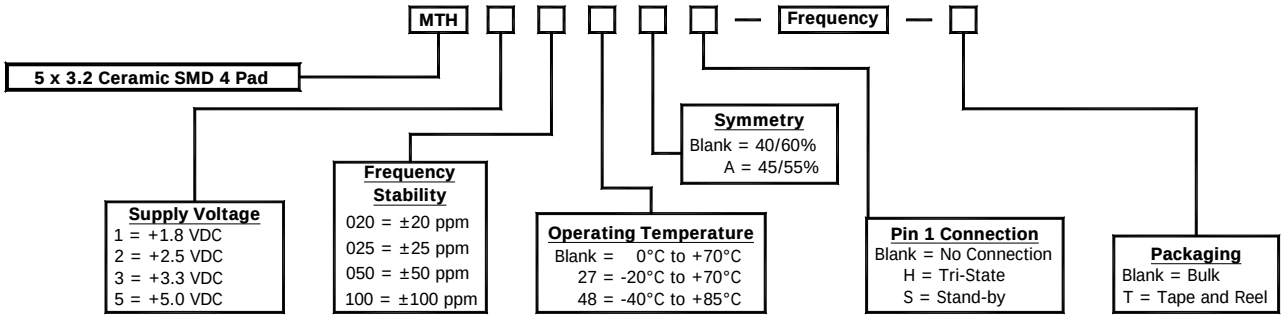
Marking Detail

Line 1 = MXXXXX		
M	=	MMD
XXXXX	=	Frequency in MHZ
Line 2 = SYYWWL		
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
Sales@mmdcomp.com

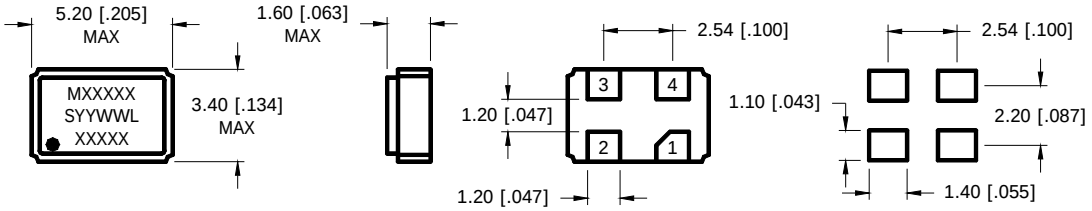
Revision:	07/14/11 L

Part Number Guide



Please Consult with MMD Sales Department for any other Parameters or Options

Mechanical Details

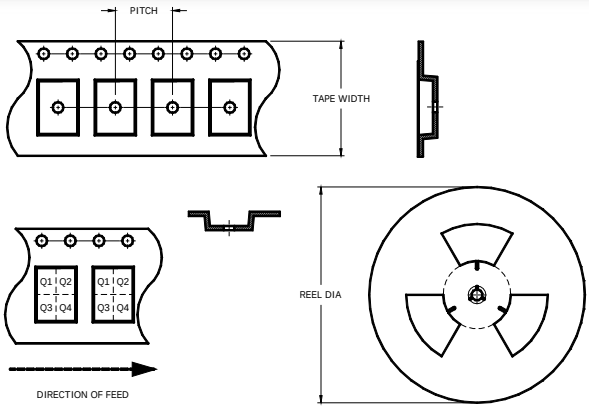


DIMENSIONS IN BRACKETS ARE IN INCHES
EXTERNAL BYPASS CAPACITOR IS RECOMMENDED

RECOMMENDED
LAND PATTERN

PIN CONNECTIONS	
PIN 1	NC, TRI-STATE OR STANDBY
PIN 2	CASE GROUND
PIN 3	OUTPUT
PIN 4	SUPPLY VOLTAGE

Tape & Reel Dimensions



PITCH	4.00 [.157]
TAPE WIDTH	8.00 [.315]
REEL DIA	180 [7.0]
COUNT	1000
PIN 1 ORIENT.	Q1

NOTES: UNLESS OTHERWISE SPECIFIED
1. Applicable Standards / Specifications
ANSI Y14.5M, Dimensions and Tolerances
EIA-481-B, 8 mm through 200mm Embossed Carrier Taping and 8 mm and 12 mm Punched Carrier Taping of Surface Mount Components for Automatic Handling.
2. Dimensions are in millimeters [inch].
3. Tolerances are ±0.1 [.004] mm unless otherwise specified.
4. Do not scale drawing.

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RoHS Compliant
Lead Free