## **MTH Series**



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

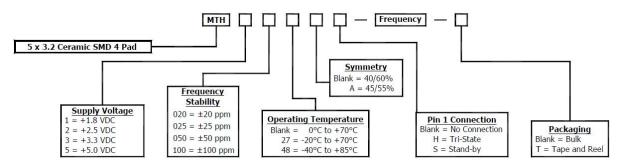


# **Electrical Specifications:**

Frequency Range		1.000MHZ to	1.000MHZ to	1.000MHZ to	1.000MHZ to
' ' -		160.000MHZ	160.000MHZ	160.000MHZ	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			

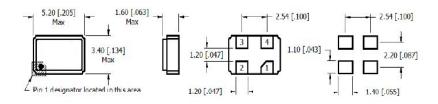


### **Part Number Guide**



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

### **Mechanical Details**



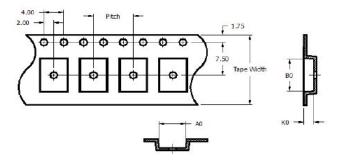
Pin Connections			
Pin 1	NC, Tri-state or		
	Stand-by		
Pin 2	Case Ground		
Pin 3	Output		
Pin 4	Supply Voltage		

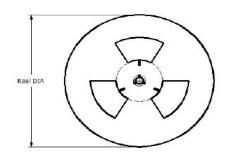
Dimension in brackets are in inches. External Bypass Capacitor is recommended. Recommended Land Pattern

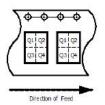
#### Pads Plating

- 1. Base or under conductor Ni thickness; 1.3 to 8.8 microns
- 2. Final plating; A(99.97%0.5 to 1.2 microns

## **Tape & Reel Dimensions**







Pitch	4.00 [0.157]	
Tape Width	8.00 [0.315]	
Reel DIA	180 [7.0]	
Count	1000	
Pin 1 Orient	Q1	

Notes: UNLESS OTHERWISE SPECIFIED

- Applicable Standards / Specifications
  ANSI Y14.5M, Dimensions and Tolerances
  EIA-481-B, 8mm through 200mm Embossed Carrier
  Tapping and 8mm and 12mm
  Punched Carrier Tapping of Surface Mount Components for
  Automatic Handling.
- 2. Dimensions are in millimetres [inch].
- Tolerances are ±0.1 [0.004] mm unless otherwise specified.
- Do not scale drawing.

#### INTERNAL ONLY INFORMATION