

# MIH Series 5X7 Ceramic SMD Oscillator



- Low Profile SMD Package
- Hermetically Sealed
- RoHS Compliant
- Wide Frequency Range



Frequency Range	1.500MHZ to 156.250MHZ			
Temperature Stability*	(See Part Number Guide for Options)			
Operating Temperature Range	(See Part Number Guide for Options)			
Storage Temperature Range	-55°C to +125°C			
Aging (+25°C ±3°C)	±5ppm for first year			
Waveform	HCMOS			
Supply Voltage ±5% (Vdd)	+1.80 VDC	+2.50 VDC	+3.30 VDC	+5.00 VDC
Supply Current	15mA	40mA	40mA	70mA
Load	15pF	15pF	10 TTL Gates or 30pF	10 TTL Gates or 50pF
Logic "0"	10% Vdd max			
Logic "1"	90% Vdd min			
Rise/Fall Time (10% to 90% of Supply Voltage)	4nSec			
Symmetry (50% of waveform)	40%/60% (45%/55% optional)			
Start-up Time	10mSec max			
Jitter (RMS)	Less than 1 pSec			
Tri-State Operation	Vih = 70% of Vdd min to Enable Output Vil = 30% max or grounded to Disable Output (High Impedance)			
Standby Current Consumption	10uA			

\* Inclusive of Temperature., Load and Voltage

## Mechanical & Environmental Detail

Shock	MIL-STD-883, Method 2002 Cond B
Solderability	MIL-STD-883, Method 2003
Solvent Resistance	MIL-STD-202, Method 215
Vibration	MIL-STD-883, Method 2007, Cond A
Gross Leak Test	MIL-STD-883, Method 1014, Cond C
Fine Leak Test	MIL-STD-883, Method 1014, Cond A2
MSL	Level 1 per IPC/JEDEC J-STD 20

## Marking Detail

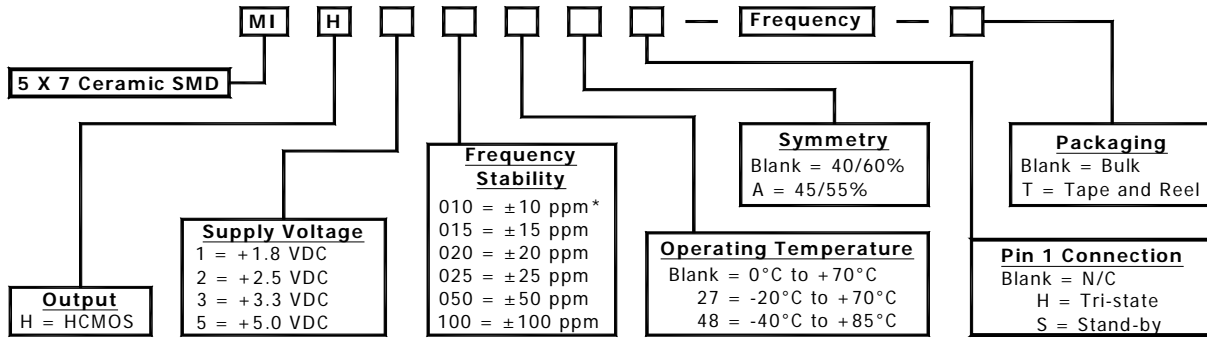
Line 1 = MXXXXX		
M	=	MMD
XXXXX	=	Frequency in MHZ
Line 2 = SYWWL		
S	=	Internal Code
YYWW	=	4 Digit Date Code (Year / Week)
L	=	Denotes RoHS Compliant
Line 3 = XXXXX		
Internal use only		
May vary with lots		
Black dot to denote Pin 1		



**MMD MONITOR/QUARTZEK – An ILSI Company,**  
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 Phone: (775) 851-8880, [www.mmdcomp.com](http://www.mmdcomp.com)

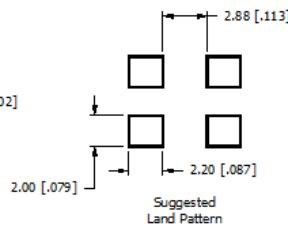
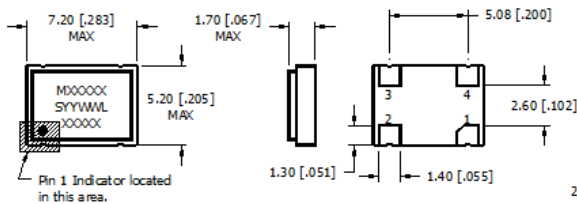


# Part Number Guide



Please Consult with MMD Sales Department for any other Parameters or Options  
 \* Not available in +1.8 VDC and +2.5 VDC

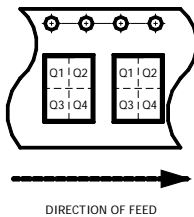
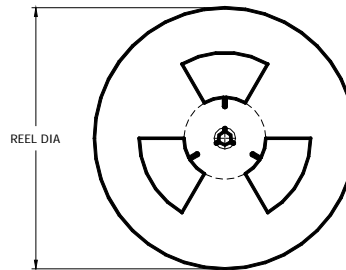
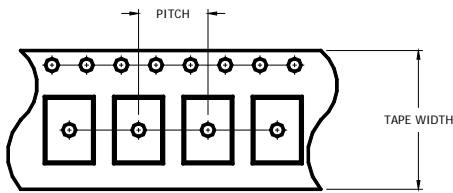
# Mechanical Details



Pin Connections	
Pin 1	N/C Tri-state or Stand-by
Pin 2	Case Ground
Pin 3	Output
Pin 4	Supply Voltage

- Notes:
- Dimensions in brackets are in inches.
  - An External Bypass Capacitor is recommended.
  - Pads plating  
 Base or under conductor Ni thickness: 1.3 um to 8.8 um  
 Final plating: Au (99.9%) less than 0.5 um, 0.3 um typ

# Tape & Reel Dimensions



PITCH	8.00 [.315]
TAPE WIDTH	16.00 [.630]
REEL DIA	180[7 IN]
QTY PER REEL	1000
PIN 1 ORIENT.	Q1

- NOTES: UNLESS OTHERWISE SPECIFIED
- 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.
  - Dimensions are in millimeters.
  - Tolerances are ±0.10 [.004] mm unless otherwise specified.
  - Do not scale drawing.



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