

# MTA and MTB Series



- Industry Standard Package
- +3.30VDC or +5.00VDC
- RoHS Compliant Available
- Up to 77.760MHZ

## ELECTRICAL SPECIFICATIONS:

Output	HCMOS	Clipped Sinewave	Sinewave
Frequency Range	1.000 MHZ to 77.760 MHZ	8.000 MHZ to 77.760 MHZ	8.000 MHZ to 77.760 MHZ
Load	10k Ohms // 15pF	10k Ohms // 15pF	50 Ohms
Supply Current	35mA max	3mA max	35mA max
Output Level	Logic "1" = 90% of Vdd min Logic "0" = 10% of Vdd max	1.0V p-p min	0 dBm min
Symmetry	40%/60% at 50% of Waveform	N/A	N/A
Freq. Stability vs Temp (Note 1)	(See Frequency Stability vs Temperature Table)		
Freq. Stability vs Aging	±1 ppm per year max		
Freq. Stability vs Voltage	±0.3 ppm with a 5% change in Vdd		
Freq. Stability vs Load	±0.3 ppm with a 10% change in Load		
Storage Temperature	-40°C to +85°C		

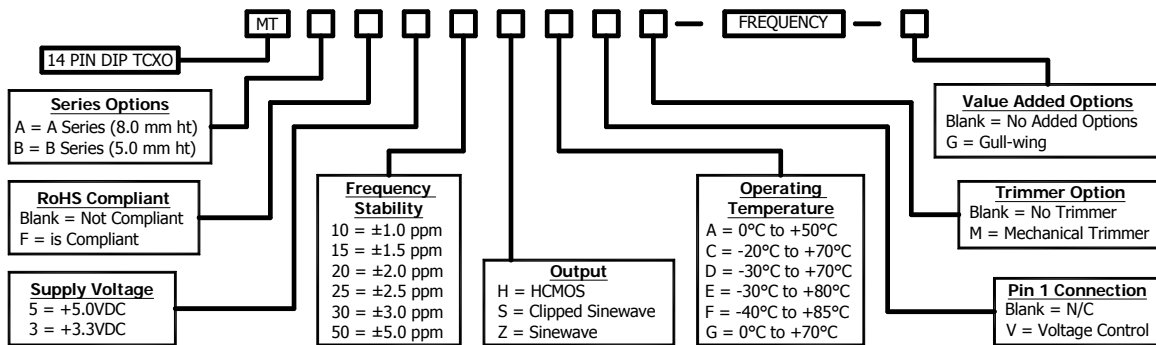
Supply Voltage (Vdd)	+3.3VDC ±5%	+5.0VDC ±5%
Control Voltage with VC option	+1.65VDC ±1.50VDC Positive Slope	+2.50VDC ±2.00VDC Positive Slope

Pin 1 Connection	
No Connection	No Connection
VC Option	±10 ppm min

Mechanical Trimmer when Specified	±3 ppm min If no mechanical trimmer is specified, trimmer may still be present depending on frequency stability option.
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Note 1: If no mechanical trimmer, oscillator frequency shall be ±1 ppm at +25°C ±3°C at time of shipment.

## PART NUMBER GUIDE:



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

**MMD Components, 30400 Esperanza, Rancho Santa Margarita, CA, 92688**  
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 Sales@mmdcomp.com

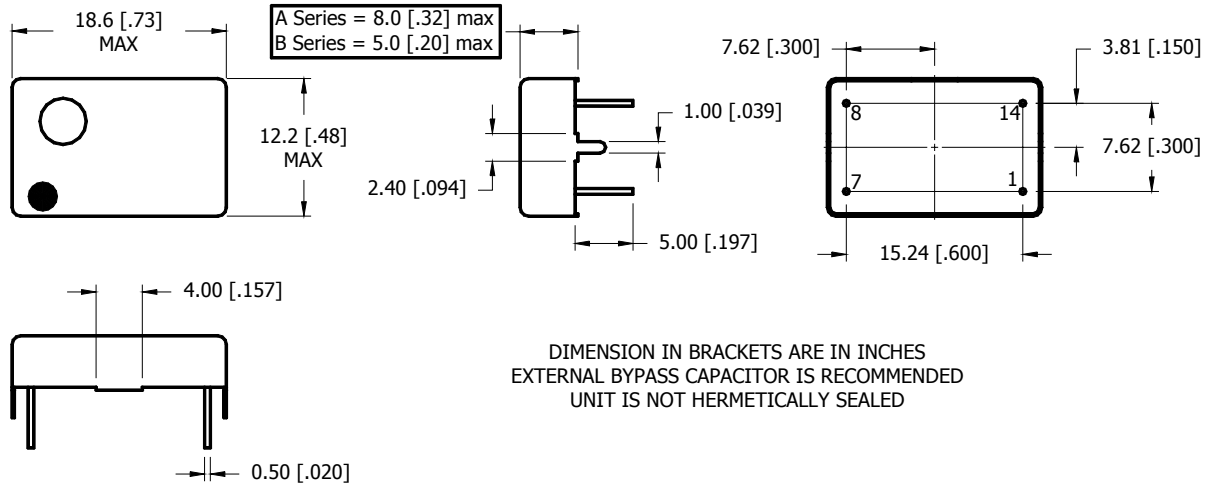
## FREQUENCY STABILITY vs TEMPERATURE TABLE:

Code	Stability	10	15	20	25	30	50
	Temp	±1.0ppm	±1.5ppm	±2.0ppm	±2.5ppm	±3.0ppm	±5.0ppm
A	0°C TO +50°C	●	●	●	●	●	●
G	0°C TO +70°C	□	●	●	●	●	●
C	-20°C TO +70°C	□	□	●	●	●	●
D	-30°C TO +70°C	□	□	□	●	●	●
F	-40°C TO +85°C	□	□	□	●	●	●

● = Available

□ = Consult with the Manufacturer

## MECHANICAL DIMENSIONS:



## ENVIRONMENT / MECHANICAL:

Shock	MIL-STD-883, Method 2002, Condition B
Solderability	MIL-STD-883, Method 2003
Solvent Resistance	MIL-STD-883, Method 215
Vibration	MIL-STD-883, Method 2007, Condition A

## PIN CONNECTIONS:

Pin 1	Control Voltage or N/C See note below
Pin 7	Case Ground
Pin 8	Output
Pin 14	Supply voltage (Vdd)
Note: If Pin 1 is not connected, pin may be deleted	

## MARKING:

Line 1: MXX.XXX  
XX.XXX = Frequency in MHz

Line 2: SYMMML  
S = Internal Code  
YYMM = Date Code (Year/Month)  
L = Denotes RoHS Compliant

Line 3: XXXXX  
Internal Manufacture Code

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