

MTBH, MTBS, and MTBZ Series



- Industry Standard Package
- +3.30VDC or +5.00VDC
- RoHS Compliant Available
- Up to 800.000MHZ

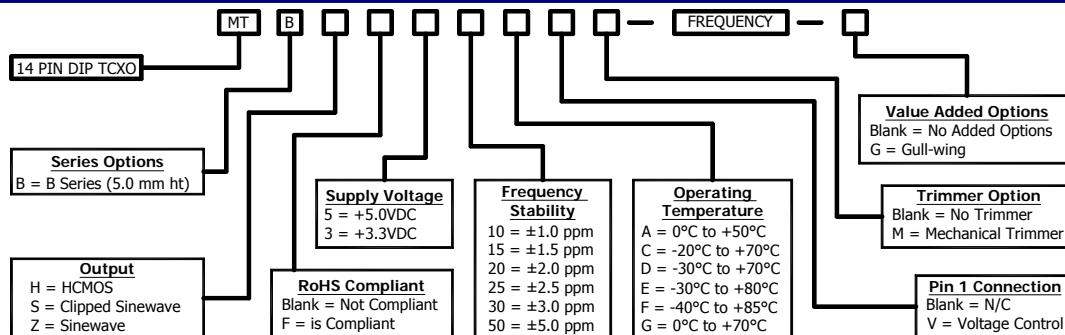


ELECTRICAL SPECIFICATIONS:

| Output | | HCMOS | Clipped Sinewave | Sinewave |
|-----------------------------------|--|--|----------------------------------|-------------------------|
| Frequency Range | Fund or 3 rd OT | 1.000KHZ to 180.000MHZ | 1.000KHZ to 180.000MHZ | 1.000KHZ to 180.000MHZ |
| | PLL | 75.000KHZ to 200.000MHZ | 75.000KHZ to 800.000MHZ | 75.000KHZ to 800.000MHZ |
| 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. | | | |

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

Phone: (949) 709-5075, Fax: (949) 709-3536, www.mmdcomp.com

Sales@mmdcomp.com

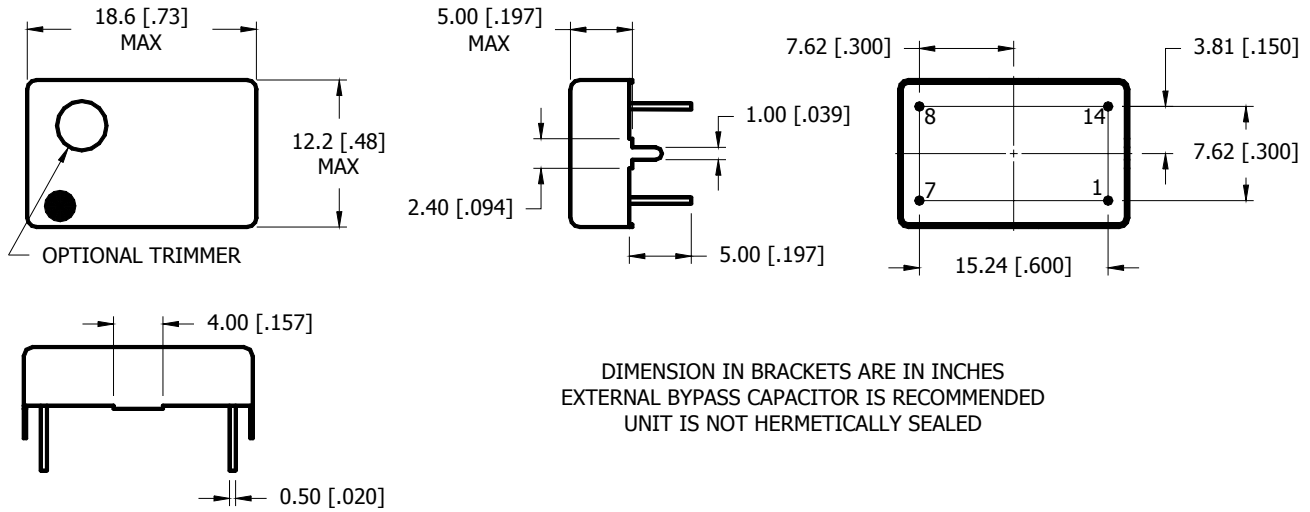
FREQUENCY STABILITY vs TEMPERATURE TABLE:

| 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 = MXXXXX

M = MMD COMPONENTS

XXXXX = Frequency in MHZ

Line 2 = SYMMML

S = Internal Code

YYMM = 4 Digit Date Code (Year / Month)

L = Denotes RoHS Compliant

Line 3 = XXXXX

Internal use only

May vary with lots

Black dot to denote Pin 1

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