

# MTE Series

Full-Size (14 Pin Dip) with Gull-Wing

**MMD**  
COMPONENTS



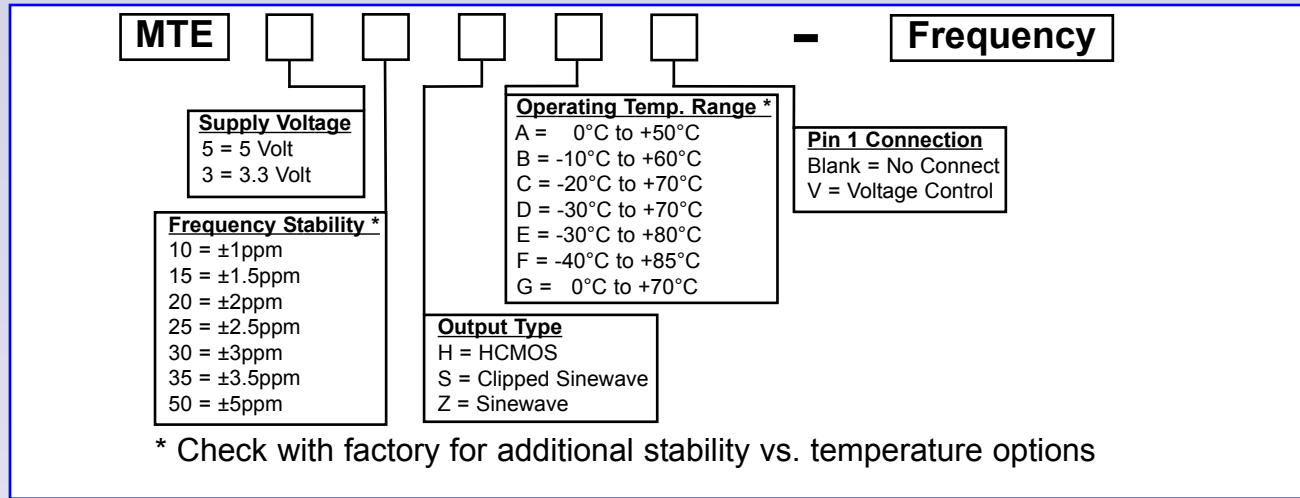
- **Industry Standard Package**
- **5.0 or 3.3 Volt**
- **HCMOS, Sinewave or Clipped Sine**
- **1.000MHz to 160.000MHz**
- **Stability Down to  $\pm 1$ ppm**

## Electrical Specifications

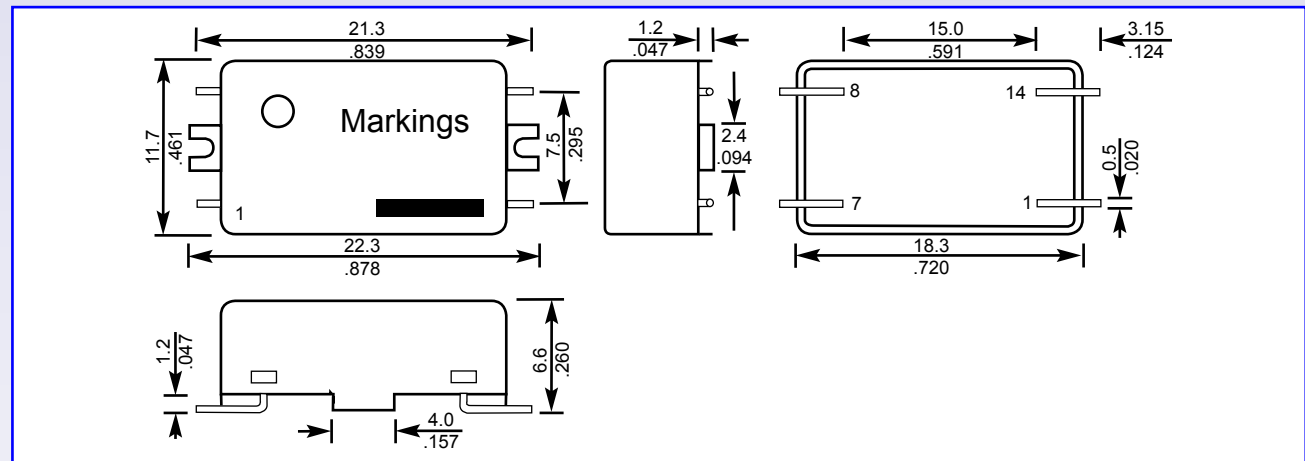
Operating Temperature Range		See Part Numbering Guide
Storage Temperature Range		-40°C to +85°C
Supply Voltage (Vdd)	Vdd = 5V	5.0Vdc $\pm 5\%$
	Vdd = 3.3V	3.3Vdc $\pm 5\%$
Internal Trim (Top of can)		$\pm 3$ ppm min.
Control Voltage	Vdd = 5V	2.5Vdc $\pm 2.0$ Vdc Positive Slope
	Vdd = 3.3V	1.65Vdc $\pm 1.5$ Vdc Positive Slope
Pin 1 Connection	Blank	No Connect
	V Option	$\pm 10$ ppm min.
Frequency Stability	vs. Aging	$\pm 1$ ppm per year max.
	vs. Voltage	$\pm 0.3$ ppm (with a 5% change)
	vs. Load	$\pm 0.3$ ppm (with a 10% change)
Symmetry		40/60% @ 50% of waveform w/CMOS load
H Option = HCMOS Output	Frequency Range	1.000MHz to 160.000MHz
	Frequency Stability	Down to $\pm 1$ ppm
	Load	10K Ohms // 15pF
	Supply Current	35mA max
	Output	Logic "1" Level = 0.9Vdd min. Logic "0" Level = 0.1Vdd max.
S Option = Clipped Sine Output	Frequency Range	8.000MHz to 160.000MHz
	Frequency Stability	See Table Below
	Load	10K Ohms // 15pF
	Supply Current	3mA max.
	Output	1.0V p-p min.
Z Option = Sinewave Output	Sinewave Output	8.000MHz to 160.000MHz
	Frequency Stability	See Table Below
	Load	50 Ohms
	Supply Current	5mA max.
	Output	7dBm min.

Notes

## Part Numbering Guide



## Mechanical Dimensions



## Pin Connections

- Pin 1: Control Voltage or No Connect
- Pin 7: Case Ground
- Pin 8: Output
- Pin 14: Supply Voltage

## Markings

- Line 1: MMD
- Line 2: Part Number
- Line 3: Frequency
- Line 4: Date Code

## Suggested Solder Pad Layout

