

MTC & MTJ Series

MMD
COMPONENTS

9.6mm x 11.7mm SMD



- **Industry Standard Package**
- **5.0 or 3.3 Volt**
- **HCMOS, Sinewave, Clipped Sine**
- **9.600MHz to 50.000MHz**
- **Stability Down to ± 1 ppm**

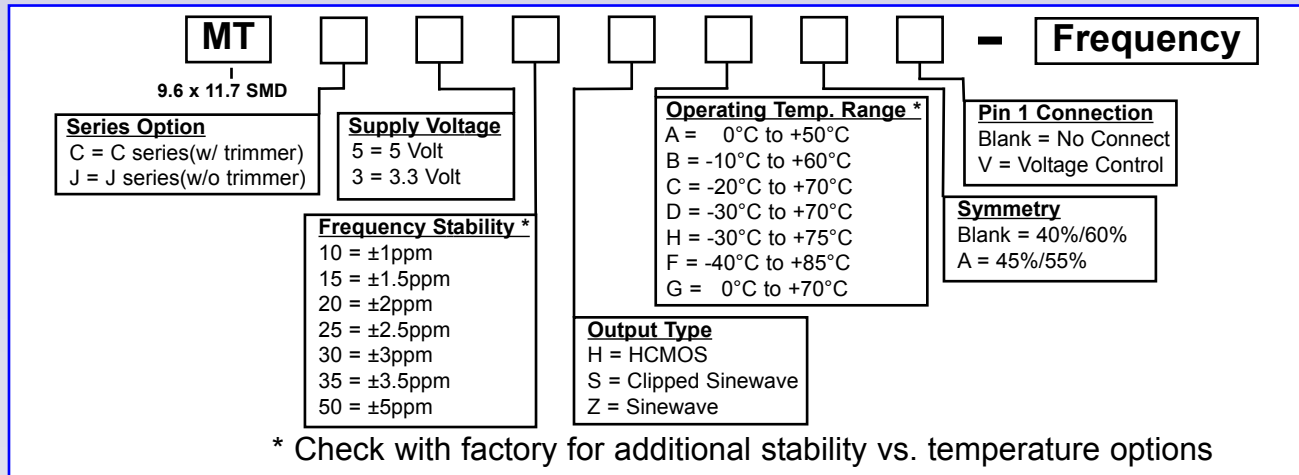
Electrical Specifications

H Option = HCMOS Output	Frequency Range	9.600MHz to 50.000MHz
	Frequency Stability	Down to ± 1 ppm
	Load	10K Ohms // 15pF
	Supply Current	35mA max.
	Output	Logic"1" Level = 0.9V _{dd} min. Logic"0" Level = 0.1V _{dd} max.
S Option = Clipped Sine Output	Frequency Range	9.600MHz to 50.000MHz
	Frequency Stability	Down to ± 1 ppm
	Load	10K Ohms // 15pF
	Supply Current	3mA max.
	Output	1.0V p-p min.
Z Option = Sinewave Output	Sinewave Output	9.600MHz to 50.000MHz
	Frequency Stability	Down to ± 1 ppm
	Load	50 Ohms
	Supply Current	5mA max.
	Output	7dBm min.
Operating Temperature Range		See Part Numbering Guide
Storage Temperature Range		-40°C to +85°C
Supply Voltage (V _{dd})	V _{dd} = 5V	5.0Vdc $\pm 5\%$
	V _{dd} = 3.3V	3.3Vdc $\pm 5\%$
Internal Trim (Top of can)		± 3 ppm min.
Control Voltage	V _{dd} = 5V	2.5Vdc ± 2.0 Vdc Positive Slope
	V _{dd} = 3.3V	1.65Vdc ± 1.5 Vdc Positive Slope
Pin 1 Connection	Blank	No Connect
	V Option	± 10 ppm min.
Frequency Stability	vs. Aging	± 1 ppm per year max.
	vs. Voltage (with a 5% change)	± 0.3 ppm
	vs. Load (with a 10% change)	± 0.3 ppm
Symmetry	@50% of waveform w/CMOS load	40/60% or 45/55%

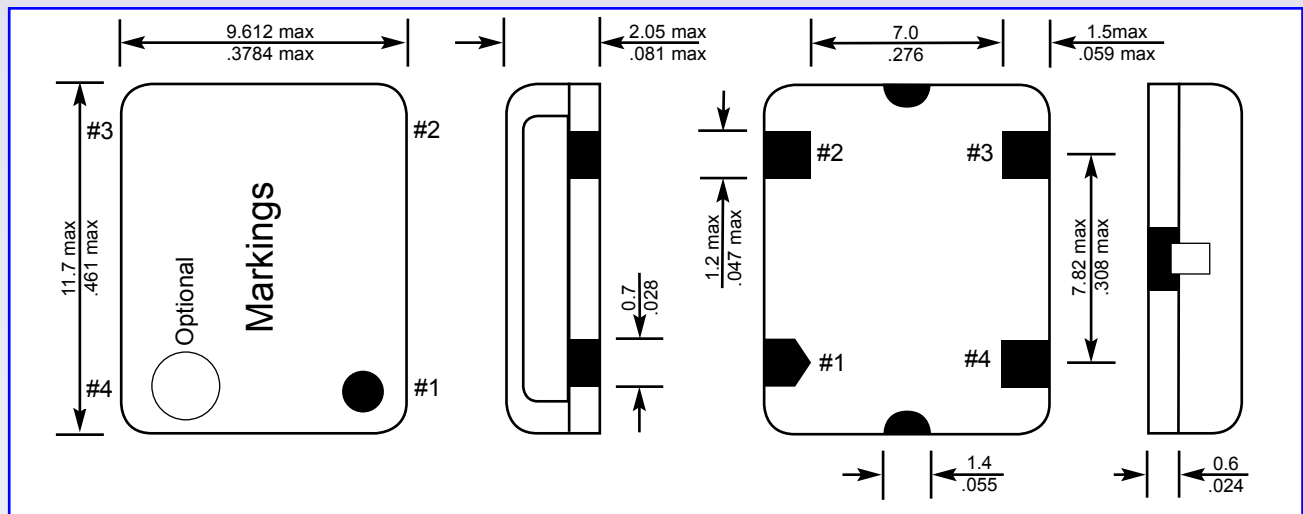
Notes



Part Numbering Guide



Mechanical Dimensions



Pin Connections

Pin 1: Control Voltage or N/C
 Pin 2: Case Ground
 Pin 3: Output
 Pin 4: Supply Voltage

Markings

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

Suggested Solder Pad Layout

