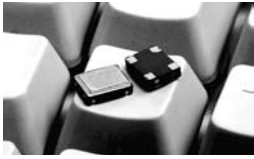


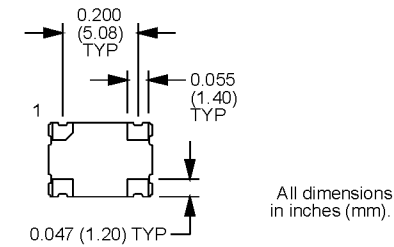
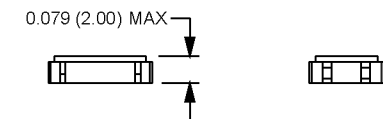
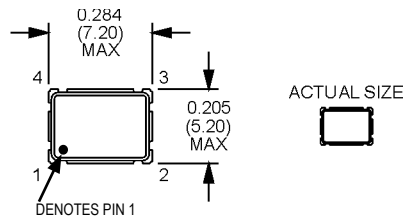
MM Series

5x7 mm, 5 Volt, HCMOS/TTL, Surface Mount Oscillator

**THIS PRODUCT IS NOT RECOMMENDED FOR NEW DESIGNS.
PLEASE REFER TO THE M1 PRODUCT SERIES.**

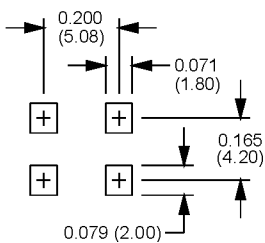


- AT-strip crystal in a miniature ceramic surface mount package.
- TTL and HCMOS compatible
- Tri-state output is optional



All dimensions in inches (mm).

SUGGESTED SOLDER PAD LAYOUT



NOTE: A capacitor of value 0.01 μ F or greater between Vdd and Ground is recommended.

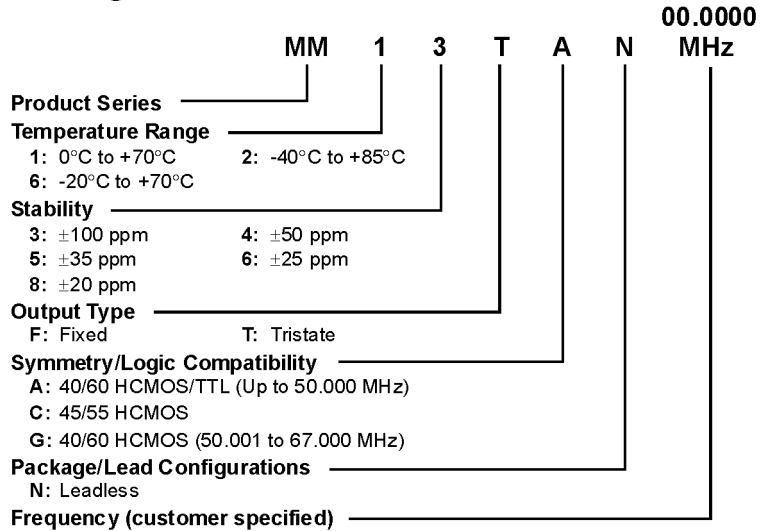
PIN	FUNCTION
1	N/C or Tri-state
2	Ground
3	Output
4	+Vdd

Tri-state Control Logic

Pin 1 high or floating: clock signal output.

Pin 1 low: output disabled to high impedance.

Ordering Information



Electrical Specifications

Standard Operating Conditions • 0°C to +70°C; Vdd = 5.0 \pm 10% VDC

Storage Temperature • -55°C to +125°C

PARAMETERS	A SYMMETRY/LOGIC				UNITS		
	TTL Load		HCMOS Load				
	MIN.	MAX.	MIN.	MAX.			
Frequency Range ¹	1.500	50.000	1.500	50.000	MHz		
Output Load ²		10		50	TTL/pF		
Symmetry ³	40/60	60/40	40/60	60/40	%		
Logic "0" Level		0.5		10% Vdd	V		
Logic "1" Level	Vdd-0.5		90% Vdd		V		
Rise/Fall Time ⁴		6		10	ns		
Supply Current							
1.500 to 15.000 MHz		20		25	mA		
15.001 to 32.000 MHz		25		30	mA		
32.001 to 50.000 Mhz		40		45	mA		
PARAMETERS	G SYMMETRY/LOGIC				UNITS		
	Frequency Range ¹			50.001		67.000	MHz
	Output Load ²					50	pF
	Symmetry ³			40/60		60/40	%
	Logic "0" Level					10% Vdd	V
	Logic "1" Level			90% Vdd			V
	Rise/Fall Time ⁴					10	ns
Supply Current				60	mA		

¹ Because this product is based on AT-strip technology, not all frequencies in the range stated are available. Contact the factory for availability of specific frequencies.

² TTL load - See load circuit diagram #1. HCMOS load - See load circuit diagram #2.

³ Symmetry is measured at 1.4 V with TTL load, and at 50% Vdd with HCMOS load.

⁴ Rise/Fall times are measured between 0.5 V and 2.4 V with TTL load, and between 10% Vdd and 90% Vdd with HCMOS load.

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Please see www.mtronpti.com for our complete offering and detailed datasheets. Contact us for your application specific requirements: MtronPTI 1-800-762-8800.

MtronPTI Lead Free Solder Profile



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