

M3 Series

5x7 mm, 3.3 Volt, HCMOS/TTL, Surface Mount Oscillator

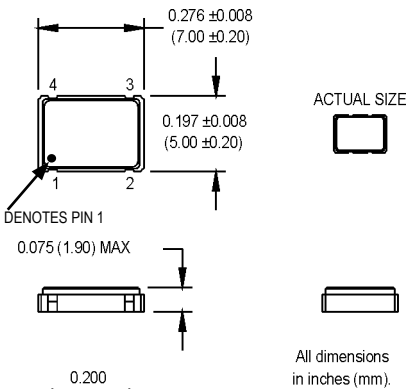
**THIS PRODUCT IS NOT RECOMMENDED FOR NEW DESIGNS.
PLEASE REFER TO THE M2 PRODUCT SERIES.**



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

Ordering Information

Product Series	M3	1	3	T	A	N	00.0000	MHz
Temperature Range	1: 0°C to +70°C		2: -40°C to +85°C		6: -20°C to +70°C			
Stability	3: ±100 ppm		4: ±50 ppm		5: ±35 ppm		6: ±25 ppm	
Output Type	F: Fixed		T: Tristate					
Symmetry/Logic Compatibility	A: 40/60 HCMOS/TTL		C: 45/55 HCMOS					
Package/Lead Configurations	N: Leadless							
Frequency (customer specified)								



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.

Electrical Specifications

Standard Operating Conditions • 0°C to +70°C; Vdd = 3.3 ±10% VDC
Storage Temperature • -55°C to +125°C

PARAMETERS	TTL Load		HCMOS Load		UNITS
	MIN.	MAX.	MIN.	MAX.	
Frequency Range ¹	1.500	67.000	1.500	67.000	MHz
Output Load ²		2		15	TTL/pF
Symmetry ³	40/60	60/40	40/60	60/40	%
Logic "0" Level		0.4		10% Vdd	V
Logic "1" Level	Vdd-0.4		90% Vdd		V
Rise/Fall Time ⁴		6		6	nS
Supply Current					
1.500 to 20.000 MHz		25		25	mA
20.001 to 67.000 MHz		40		40	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 0.4 V and 2.4 V with TTL load, and between 10% Vdd and 90% Vdd with HCMOS load.

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

MtronPTI Lead Free Solder Profile

