

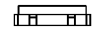
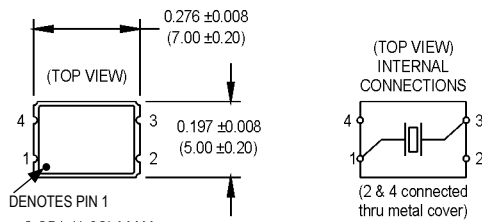
# PM Surface Mount Crystals

## 5.0 x 7.0 x 1.3 mm

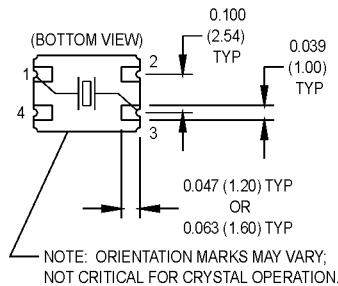


### Ordering Information

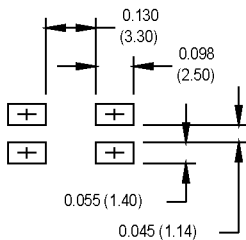
Product Series	PM	1	M	M	XX	00.0000 MHz
Temperature Range	1: 0°C to +70°C    2: -40°C to +85°C 3: -55°C to +105°C    4: -55°C to +125°C 5: -10°C to +85°C    6: -20°C to +70°C					
Tolerance	D: ±10 ppm    F: ±15 ppm G: ±20 ppm    H: ±25 ppm J: ±30 ppm    M: ±50 ppm					
Stability	D: ±10 ppm    F: ±15 ppm G: ±20 ppm    H: ±25 ppm J: ±30 ppm    M: ±50 ppm P: ±100 ppm					
Load Capacitance	Blank: 18 pF (std) S: Series Resonant XX: Customer Specified 10 pF to 32 pF					
Frequency (customer specified)						



All dimensions in inches (mm).



### SUGGESTED SOLDER PAD LAYOUT



### Available Stabilities vs. Temperature

T \ S	D	F	G	H	J	M	P
1	A	A	A	A	A	S	A
2	N	A	A	A	A	A	A
3	N	N	N	N	N	A	A
4	N	N	N	N	N	A	A
5	N	A	A	A	A	A	A
6	N	A	A	A	A	A	A

A = Available    S = Standard  
N = Not Available

Electrical/Environmental Specifications	PARAMETERS	VALUE
	Frequency Range*	9.500 to 150.000 MHz
	Tolerance @ +25°C	See Table Above
	Stability	See Table Above
	Aging	±5 ppm/yr Max
	Shunt Capacitance	5 pF Max.
	Load Capacitance	See ordering information
	Standard Operating Conditions	See Table Above
	Equivalent Series Resistance (ESR), Max.	
	Fundamental (AT-cut)	
	9.5000 to 10.999 MHz	60 Ω
	11.000 to 13.999 MHz	50 Ω
	14.000 to 15.999 MHz	40 Ω
	16.000 to 40.500 MHz	30 Ω
	Third Overtones (AT-cut)	
	35.000 to 39.999 MHz	100 Ω
	40.000 to 49.999 MHz	80 Ω
	50.000 to 90.000 MHz	100 Ω
	Fifth Overtones (AT-cut)	
	90.000 to 150.000 MHz	100 Ω
	Drive Level	100 μW Max.
	Mechanical Shock	MIL-STD-202, Method 213, C
	Vibration	MIL-STD-202, Method 201 & 204
	Thermal Cycle	MIL-STD, Method 1010, B

\* 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.

MtronPTI reserves the right to make changes to the product(s) and service(s) described herein without notice. No liability is assumed as a result of their use or application.

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

Revision: 02-28-07

## MtronPTI Lead Free Solder Profile

