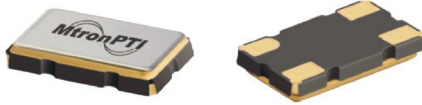


PP & PR Surface Mount Crystals

3.5 x 6.0 x 1.2 mm

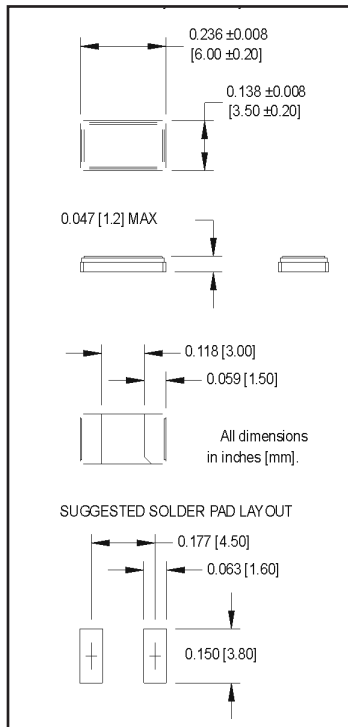


- Miniature low profile package (2 & 4 Pad)
- RoHS Compliant
- Wide frequency range
- PCMCIA - high density PCB assemblies

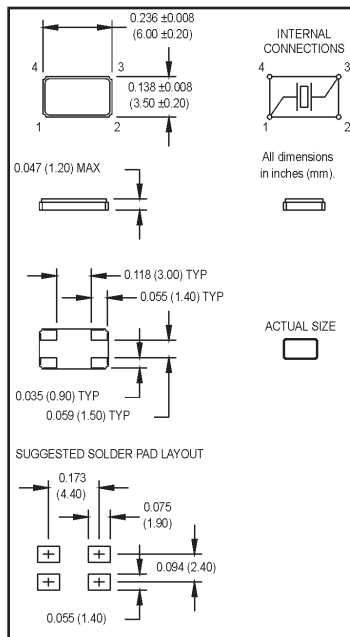
Ordering Information

	PP	1	M	M	XX	00.0000 MHz
Product Series						
PP: 4 Pad						
PR: 2 Pad						
Temperature Range						
1: 0°C to +70°C						
3: -10°C to +60°C						
6: -20°C to +70°C						
2: -40°C to +85°C						
Tolerance						
D: ±10 ppm	J: ±30 ppm					
F: ±15 ppm	M: ±50 ppm					
G: ±20 ppm	H: ±25 ppm					
Stability						
C: ±5 ppm	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)						

PR (2 Pad)



PP (4 Pad)



M1003Sxxx & M1005Sxxx - Contact factory for datasheet.

Available Stabilities vs. Temperature

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

A = Available
N = Not Available

PARAMETERS	VALUE
Frequency Range*	10.000 to 180.000 MHz
Tolerance @ +25°C	See ordering information
Stability	See ordering information
Aging	±2 ppm/yr Max
Shunt Capacitance	5 pF Max.
Load Capacitance	See ordering information
Standard Operating Conditions	See ordering information
Equivalent Series Resistance (ESR), Max.	
Fundamental (AT-cut)	
10.000 to 12.999 MHz	80 Ω Max.
13.000 to 13.999 MHz	50 Ω Max.
14.000 to 19.999 MHz	40 Ω Max.
20.000 to 45.000 MHz	30 Ω Max.
Third Overtones (AT-cut)	
40.000 to 150.000 MHz	50 Ω Max.
Fifth Overtones (AT-cut)	
100.000 to 180.000 MHz	90 Ω Max.
Drive Level	100 μW Max, 50 μW Typ, 10 μW Min
Mechanical Shock	MIL-STD-202, Method 213, C
Vibration	MIL-STD-202, Method 201 & 204
Thermal Cycle	MIL-STD, Method 1010, B
Max Soldering Conditions	See solder profile, Figure 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 frequencies > 100 MHz.

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

MtronPTI Lead Free Solder Profile

