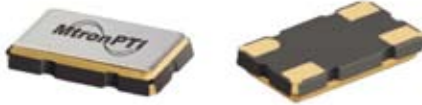


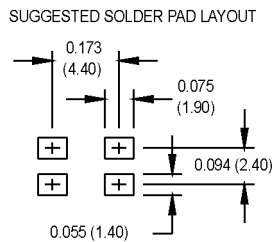
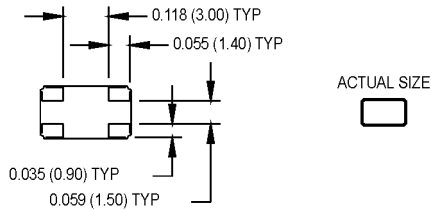
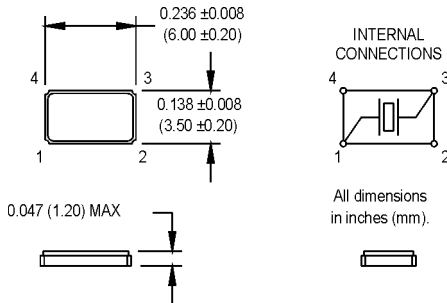
PP Surface Mount Crystals

3.5 x 6.0 x 1.2 mm



Ordering Information

Product Series	PP	1	M	M	XX	00.0000 MHz
Temperature Range	1: 0°C to +70°C 2: -10°C to +60°C		3: -20°C to +70°C 4: -30°C to +60°C		5: -20°C to +80°C 6: -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
Load Capacitance	M: ±50 ppm	P: ±100 ppm	Blank: 18 pF (std) S: Series Resonant XX: Customer Specified 10 pF to 32 pF			
Frequency (customer specified)						



Electrical/Environmental Specifications

PARAMETERS	VALUE
Frequency Range*	10.000 to 180.000 MHz
Tolerance @ +25°C	See Table Above
Stability	See Table Above
Aging	±2 ppm/yr. Max.
Shunt Capacitance	5 pF Max.
Load Capacitance	See ordering information
Standard Operating Conditions	See Table Above
Storage Temperature	-40°C to +85°C
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.
Mechanical Shock	MIL-STD-202, Method 213, C
Vibration	MIL-STD-202, Method 201 & 204
Thermal Cycle	MIL-STD-883, 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.

Available Stabilities vs. Temperature

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

A = Available
N = Not Available

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

