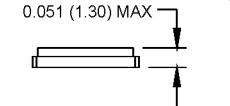
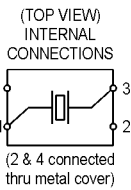
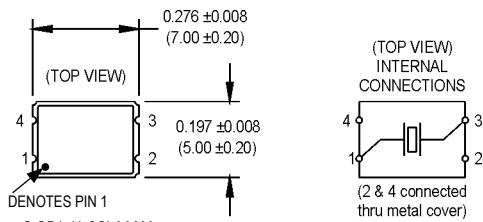


PM Surface Mount Crystals

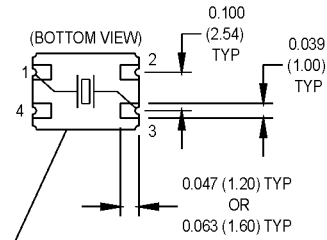
5.0 x 7.0 x 1.3 mm



| Ordering Information | | 00.0000 MHz |
|--------------------------------|--|----------------|
| Product Series | PM 1 M M XX | |
| 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) | | |

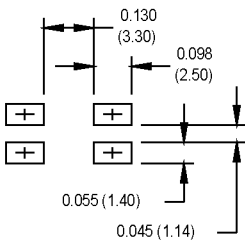


All dimensions in inches (mm).



NOTE: ORIENTATION MARKS MAY VARY; NOT CRITICAL FOR CRYSTAL OPERATION.

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

| 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 | |
| Electrical/Environmental Specifications | 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.

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Revision: 02-28-07

MtronPTI Lead Free Solder Profile



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