# **PM Surface Mount Crystals** 5.0 X 7.0 X 1.3 mm





### Features:

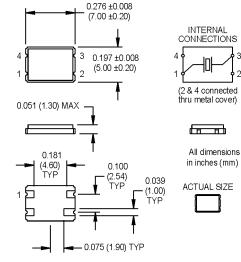
**Ultra-miniature Size** 

3

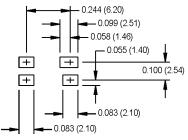
- Wide Frequency Range
- **Tight Stability Over Extended Temperature**
- Rugged Ceramic Package

#### **Applications:**

- **Notebook Computers**
- **PCMCIA Cards**
- **Pocket LAN Adapters**
- **Disk Drives**
- **Telecommunications Equipment**



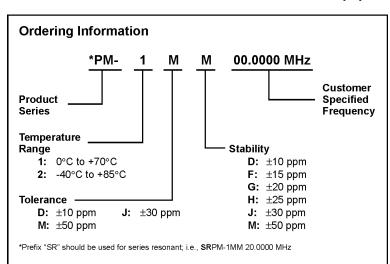
SUGGESTED SOLDER PAD LAYOUT



#### Available Stabilities vs. Temperature

| TS | D | F | G | Н | J | М |
|----|---|---|---|---|---|---|
| 1  | А | А | А | А | А | S |
| 2  | N | А | Α | А | А | А |

A=Available S = Standard N = Not Available



## **Electrical 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                         | 18 pF Std.           |  |  |
| Standard Operating Conditions            | See Table Above      |  |  |
| Equivalent Series Resistance (ESR), Max. |                      |  |  |
| Fundamental (AT-cut)                     |                      |  |  |
| 9.500 to 10.999 MHz                      | 60 Ω                 |  |  |
| 11.000 to 13.999 MHz                     | 50 Ω                 |  |  |
| 14.000 to 15.999 MHz                     | <b>40</b> Ω          |  |  |
| 16.000 to 40.500 Mhz                     | <b>30</b> Ω          |  |  |
| Third Overtones (AT-cut)                 |                      |  |  |
| 35.000 to 39.999 MHz                     | <b>100</b> Ω         |  |  |
| 40.000 to 49.999 MHz                     | 80 Ω                 |  |  |
| 50.000 to 90.000 Mhz                     | 50 Ω                 |  |  |
| Fifth Overtones (AT-cut)                 |                      |  |  |
| 90.000 to 150.000 Mhz                    | <b>100</b> Ω         |  |  |
| Drive Level                              | 100 μW Max.          |  |  |

\* 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. See page 136, Figure "2" for suggested solder profile.

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