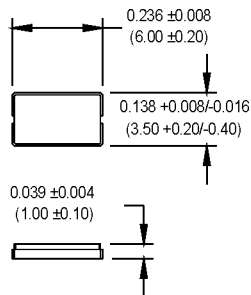


# PR Series

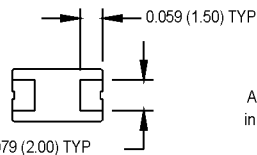
## 3.5 x 6.0 x 1.0 mm Surface Mount Crystals



- Miniature low profile package
- RoHS Compliant
- Wide frequency range
- PCMCIA - high density PCB assemblies

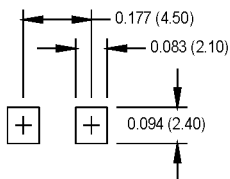


ACTUAL SIZE

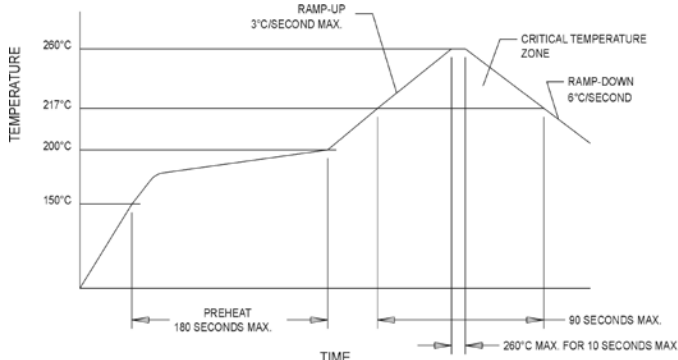


All dimensions  
in inches (mm).

SUGGESTED SOLDER PAD LAYOUT



**Figure 1**  
**+260°C Reflow Profile**



### Ordering Information

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

Note: Not all combinations of stability and operating temperature are available.

| PARAMETERS                               | VALUE                             |
|------------------------------------------|-----------------------------------|
| Frequency Range*                         | 12.000 to 100.000 MHz             |
| Tolerance @ +25°C                        | See Table Above                   |
| Stability                                | See Table Above                   |
| Aging                                    | ±5 ppm/yr. Max.                   |
| Shunt Capacitance                        | 7 pF Max.                         |
| Load Capacitance                         | 18 pF Std.                        |
| Standard Operating Conditions            | -20°C to +70°C                    |
| Storage Temperature                      | -40°C to +85°C                    |
| Equivalent Series Resistance (ESR), Max. |                                   |
| Fundamental (AT-cut)                     |                                   |
| 12.000 to 40.000 MHz                     | 60 Ω                              |
| Third Overtones (AT-cut)                 |                                   |
| 40.000 to 100.000 MHz                    | 60 Ω                              |
| 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-883, Method 1010, B       |

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## MtronPTI Lead Free Solder Profile

