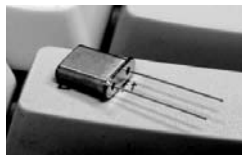
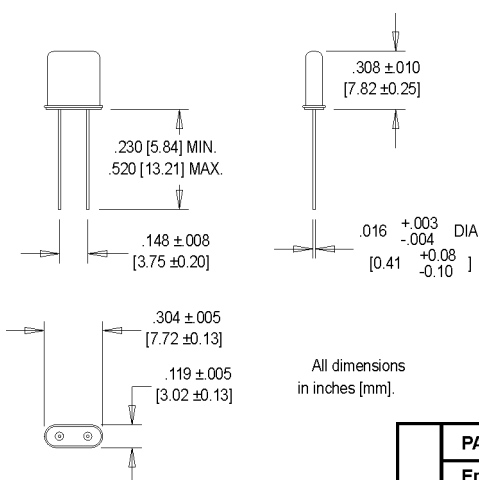


# CIM Crystals



- Former **Champion** Technologies, Inc. Product
- Low-Jitter, Precision Clocks, VCXO's and TCVCXO's



## Ordering Information

|                                |                |   |   |         |
|--------------------------------|----------------|---|---|---------|
|                                |                |   |   | 00.0000 |
|                                | CIM            | X | X | MHz     |
| Product Series                 |                |   |   |         |
| Load Capacitance               |                |   |   |         |
| A:                             | Series         |   |   |         |
| B:                             | 32 pF          |   |   |         |
| C:                             | 20 pF          |   |   |         |
| Temperature Range              |                |   |   |         |
| Blank:                         | 0°C to +70°C   |   |   |         |
| M:                             | -40°C to +85°C |   |   |         |
| Frequency (customer specified) |                |   |   |         |

|                           | PARAMETER                 | Symbol                                  | Min.   | Typ. | Max.    | Units | Condition                                              |
|---------------------------|---------------------------|-----------------------------------------|--------|------|---------|-------|--------------------------------------------------------|
| Electrical Specifications | Frequency Range           | F                                       | 51.840 |      | 155.520 | MHz   | Nominal                                                |
|                           | Frequency Tolerance       |                                         | -25    |      | +25     | ppm   | 25°C ±3°C @ CL=32pF                                    |
|                           | Pullability               |                                         |        |      | 105     | ppm   | (Fo - Fs) @ 32pF                                       |
|                           | Operating Temperature     |                                         | -40    |      | +85     | °C    |                                                        |
|                           | Temperature Stability     |                                         | -20    |      | +20     | ppm   | re: 25°C, 0°C to +70°C                                 |
|                           | Series Resistance         | Rs                                      |        |      | 30      | Ω     | All conditions                                         |
|                           | Standard Load Capacitance | Cl                                      |        |      | 32      | pF    |                                                        |
|                           | Shunt Capacitance         | Co                                      |        | 3.0  |         | pF    | Frequency dependent                                    |
|                           | Motion Capacitance        | Cm                                      |        | 8.0  |         | pF    | CL=32pF, freq.dependent                                |
|                           | Aging                     |                                         |        |      | 4.0     | ppm   | @ 25°C, first year                                     |
| Environmental             | Temperature Cycle         | MIL-STD-883, Method 1010, Condition B   |        |      |         |       | -55°C to +125°C; Air-to-Air; 100 cycles; 10 min. dwell |
|                           | Mechanical Shock          | MIL-STD-883, Method 2002, Condition B   |        |      |         |       | 1500 g's                                               |
|                           | Vibration                 | MIL-STD-883, Method 2007, Condition B   |        |      |         |       | 20-2000 Hz; 0.06 inch; 15 g's; 3 planes                |
|                           | Humidity Steady State     | MIL-STD-202, Method 103                 |        |      |         |       | 40°C; 90%-95% R.H.; 56 days                            |
|                           | Thermal Shock             | MIL-STD-883, Method 1011.7, Condition B |        |      |         |       | 100°C to 0°C; Water-to-Water; 15 cycles                |
|                           | Electrostatic Discharge   | MIL-STD-883, Method 3015, Class II      |        |      |         |       | 2 KV to 4 KV Threshold                                 |
|                           | Solderability             | MIL-STD-883, Method 2022.2              |        |      |         |       | Solder dip; Meniscograph Criteria                      |
|                           | Hermeticity               | MIL-STD-883, Method 1014.8, Cond. A1    |        |      |         |       | Mass spectro. 2 x 10-8 atmos. CC/sec He                |
|                           | Resistance to Soldering   | See page 147                            |        |      |         |       |                                                        |
|                           | Lead Integrity            | MIL-STD-883, Mtd. 2004.5, Cond. A, B1   |        |      |         |       | Lead tension & bend stress                             |
|                           | Marking Permanence        | MIL-STD-883, Method 2015.8              |        |      |         |       | Resistance to solvents                                 |
|                           | Life Test                 | MIL-STD-883, Method 1005.6              |        |      |         |       | 125°C, powered, 1000 hours minimum                     |

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.

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