

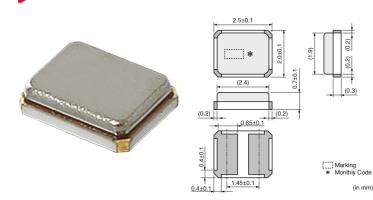
XRCHA20M000F0A12R0



## Applications

| Unsuitable   | Please be sure to read and comply with     |
|--------------|--|
| Applications | these "Precautions for use."               |
|              | Automotive powertrain/safety equipment     |
|              | Please refer to Our Website and            |
|              | specifications, etc. for information about |
| Specific     | the performance, functions, quality,       |
| Specific     | management, and safety required for        |
| Applications | the above applications, and use            |
|              | Products after confirming the              |
|              | performance and reliability of the actual  |
|              | Product.                                   |

## Appearance & Shape



Note: This datasheet may be out of date. Please download the latest datasheet of XRCHA20M000F0A12R0 from the official website of Murata Manufacturing Co., Ltd.

http://www.murata.com/en-sg/products/productdetail?partno=XRCHA20M000F0A12R0

## Packaging Information

| Packaging | Specifications     | Standard<br>Packing<br>Quantity |
|-----------|--------------------|---------------------------------|
| R0        | 180mm Plastic Tape | 3000                            |



The crystal unit for automotive electronics that realized small package and highly accurate frequency.

Based on Murata's excellent package technology and high grade quartz crystal elements, achieving small size and high ccuracy unit.

### Features

1. The series has high reliability and is available for a wide temperature range.

2.The crystal unit is small size (2.5  $\times$  2.0  $\times$  0.8 (mm)) , and contribute to reduction in mounting area.

3. The series complies to RoHS and ELV directives , being lead-free (phase 3).

4.The series complies to AEC-Q200.

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#### Attention

1. This datasheet is downloaded from the website of Murata Manufacturing Co., Ltd. Therefore, it's specifications are subject to change or our products in it may be discontinued

without advance notice. Please check with our sales representatives or product engineers before ordering.

2. This datasheet has only typical specifications because there is no space for detailed specifications.

Therefore, please review our product specifications or consult the approval sheet for product specifications before ordering





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## Specifications

| Product Type                          | Crystal Unit              |
|---------------------------------------|---------------------------|
| Series                                | XRCHA                     |
| Туре                                  | HCR2520                   |
| Frequency                             | 20.0000MHz                |
| Frequency Tolerance                   | +/-100ppm max. (25+/-3°C) |
| Operating Temperature<br>Range        | -40°C~150°C               |
| Frequency Shift by<br>Temperature     | +/-100ppm max.            |
| Frequency Aging                       | +/-5ppm max./year         |
| Equivalent Series<br>Resistance (ESR) | 80ohm max.                |
| Drive Level (DL)                      | 150µW (300µW max.)        |
| Load Capacitance (Cs)                 | 8pF                       |
| Shape                                 | SMD                       |
| Wash                                  | Not available             |
| L x W (size)                          | 2.5x2.0mm                 |
| Mass                                  | 11.3mg                    |

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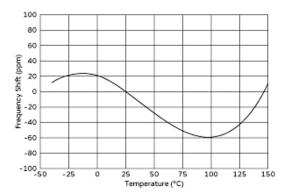
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INNOVATOR IN ELECTRONICS



**Temperature Characteristics** 

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