



Click [here](#) for the 3D model.

## General Information

|                          |                                                                           |
|--------------------------|---------------------------------------------------------------------------|
| Series                   | ESD SMD Auto X7R                                                          |
| Style                    | SMD Chip                                                                  |
| Description              | SMD, MLCC, Temperature Stable, Electro Static Discharge, Automotive Grade |
| Features                 | Temperature Stable, Automotive Grade                                      |
| RoHS                     | Yes                                                                       |
| Termination              | Tin                                                                       |
| Marking                  | No                                                                        |
| Qualifications           | AEC-Q200                                                                  |
| AEC-Q200                 | Yes                                                                       |
| Typical Component Weight | 1.21 mg                                                                   |
| Shelf Life               | 78 Weeks                                                                  |
| MSL                      | 1                                                                         |

## Dimensions

|           |                 |
|-----------|-----------------|
| Chip Size | 0402            |
| L         | 1mm +/-0.05mm   |
| W         | 0.5mm +/-0.05mm |
| T         | 0.5mm +/-0.05mm |
| S         | 0.3mm MIN       |
| B         | 0.3mm +/-0.1mm  |

## Packaging Specifications

|                    |                        |
|--------------------|------------------------|
| Packaging          | T&R, 330mm, Paper Tape |
| Packaging Quantity | 50000                  |

## Specifications

|                                                                    |                                                 |
|--------------------------------------------------------------------|-------------------------------------------------|
| Capacitance                                                        | 2,200 pF                                        |
| Measurement Condition                                              | 1 kHz 1.0Vrms                                   |
| Tolerance                                                          | 10%                                             |
| Voltage DC                                                         | 50 VDC                                          |
| ESD Level per AEC-Q200                                             | 6,000 V ESD Level                               |
| Dielectric Withstanding Voltage                                    | 125 VDC                                         |
| Temperature Range                                                  | -55/+125°C                                      |
| Temp. Coefficient                                                  | X7R                                             |
| Capacitance Change with Reference to +25°C and 0 VDC Applied (TCC) | 15%, 1kHz 1.0Vrms                               |
| Dissipation Factor                                                 | 2.5% 1kHz 1.0Vrms                               |
| Aging Rate                                                         | 3% Loss/Decade Hour: Referee Time is 1000 Hours |
| Insulation Resistance                                              | 100 GOhms                                       |

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