



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

#### General Information

|                          |                                                                                                                              |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Series                   | SMD COTS X7R                                                                                                                 |
| Style                    | SMD Chip                                                                                                                     |
| Description              | SMD, MLCC, COTS, Temperature Stable, Class II                                                                                |
| Features                 | Temperature Stable, Class II                                                                                                 |
| RoHS                     | No                                                                                                                           |
| Prop 65                  | <b>WARNING:</b> Cancer and reproductive harm - <a href="https://www.p65warnings.ca.gov/">https://www.p65warnings.ca.gov/</a> |
| Termination              | Lead (SnPb)                                                                                                                  |
| Marking                  | No                                                                                                                           |
| Failure Rate             | Testing per MIL-PRF-55681 PDA 8%, DPA per EIA-469, Humidity per MIL-STD-202, Method 103, Condition A                         |
| AEC-Q200                 | No                                                                                                                           |
| Typical Component Weight | 4.8 mg                                                                                                                       |
| Shelf Life               | 78 Weeks                                                                                                                     |
| MSL                      | 1                                                                                                                            |

#### Dimensions

|                      |                  |
|----------------------|------------------|
| L                    | 1.6mm +/-0.15mm  |
| W                    | 0.8mm +/-0.15mm  |
| T                    | 0.8mm +/-0.07mm  |
| S                    | 0.5mm MIN        |
| B                    | 0.35mm +/-0.15mm |
| Case Code (EIA / mm) | 0603 / 1608      |

#### Packaging Specifications

|                    |                        |
|--------------------|------------------------|
| Packaging          | T&R, 180mm, Paper Tape |
| Packaging Quantity | 4000                   |

#### Specifications

|                                                                    |                                                 |
|--------------------------------------------------------------------|-------------------------------------------------|
| Capacitance                                                        | 0.22 uF                                         |
| Measurement Condition                                              | 1 kHz 1.0Vrms                                   |
| Tolerance                                                          | 5%                                              |
| Voltage DC                                                         | 10 VDC                                          |
| Dielectric Withstanding Voltage                                    | 25 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                                                 | 5% 1 kHz 1.0Vrms                                |
| Aging Rate                                                         | 3% Loss/Decade Hour: Referee Time is 1000 Hours |
| Insulation Resistance                                              | 2.2727 GOhms                                    |

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