



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> |
| SCIP Number              | 2d771165-5336-48a3-96fa-3663929fd828   |
| 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

|           |                  |
|-----------|------------------|
| Chip Size | 0603             |
| L         | 1.6mm +/-0.15mm  |
| W         | 0.8mm +/-0.15mm  |
| T         | 0.8mm +/-0.07mm  |
| S         | 0.5mm MIN        |
| B         | 0.35mm +/-0.15mm |

#### Packaging Specifications

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

#### Specifications

|  |   |
|--|---|
| Capacitance  | 0.047 uF  |
| Measurement Condition  | 1 kHz 1.0Vrms                                   |
| Tolerance  | 10%   |
| Voltage DC   | 16 VDC  |
| Dielectric Withstanding Voltage                                    | 40 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   | 3.5% 1 kHz 1.0Vrms                              |
| Aging Rate   | 3% Loss/Decade Hour: Referee Time is 1000 Hours |
| Insulation Resistance  | 10 GOhms  |

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