

SMD Auto X7R, Ceramic, 680 pF, 10%, 50 VDC, X7R, SMD, MLCC, Temperature Stable, Automotive Grade, 0603



**Dimensions**

| Chip Size | 0603             |
|-----------|------------------|
| L         | 1.6mm +/-0.15mm  |
| W         | 0.8mm +/-0.15mm  |
| T         | 0.8mm +/-0.07mm  |
| S         | 0.7mm MIN        |
| B         | 0.35mm +/-0.15mm |

**Packaging Specifications**

|                            |                        |
|----------------------------|------------------------|
| <b>Packaging:</b>          | T&R, 180mm, Paper Tape |
| <b>Packaging Quantity:</b> | 4000                   |

**General Information**

|                          |   |
|--------------------------|---|
| <b>Series:</b>           | SMD Auto X7R                                    |
| <b>Style:</b>            | SMD Chip  |
| <b>Description:</b>      | SMD, MLCC, Temperature Stable, Automotive Grade |
| <b>Features:</b>         | Temperature Stable, Automotive Grade            |
| <b>RoHS:</b>             | Yes   |
| <b>Termination:</b>      | Tin   |
| <b>Marking:</b>          | No  |
| <b>Qualifications:</b>   | AEC-Q200  |
| <b>AEC-Q200:</b>         | Yes   |
| <b>Component Weight:</b> | 4800 ug   |
| <b>Shelf Life:</b>       | 78 Weeks  |
| <b>MSL:</b>              | 1   |

**Specifications**

|  |   |
|--|---|
| <b>Capacitance:</b>  | 680 pF  |
| <b>Measurement Condition:</b>  | 1 kHz 1.0Vrms                                   |
| <b>Capacitance Tolerance:</b>  | 10%   |
| <b>Voltage DC:</b>   | 50 VDC  |
| <b>Dielectric Withstanding Voltage:</b>                                    | 125 VDC   |
| <b>Temperature Range:</b>  | -55/+125°C                                      |
| <b>Temperature Coefficient:</b>  | X7R   |
| <b>Capacitance Change with Reference to +25°C and 0 VDC Applied (TCC):</b> | 15%, 1kHz 1.0Vrms                               |
| <b>Dissipation Factor:</b>   | 2.5% 1 kHz 1.0Vrms                              |
| <b>Aging Rate:</b>   | 3% Loss/Decade Hour: Referee Time is 1000 Hours |
| <b>Insulation Resistance:</b>  | 100 GOhms                                       |