

## C0402T221J5RALTU

Aliases (C0402T221J5RAL7867)

SMD COTS X7R, Ceramic, 220 pF, 5%, 50 VDC, X7R, SMD, MLCC, COTS, Temperature Stable, Class II, 0.3 mm, 0402 / 1005



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%                                                                                             |
| AEC-Q200                 | No                                                                                                                           |
| Typical Component Weight | 1.21 mg                                                                                                                      |
| Shelf Life               | 78 Weeks                                                                                                                     |
| MSL                      | 1                                                                                                                            |

### Dimensions

|                      |                 |
|----------------------|-----------------|
| L                    | 1mm +/-0.05mm   |
| W                    | 0.5mm +/-0.05mm |
| T                    | 0.5mm +/-0.05mm |
| S                    | 0.3mm MIN       |
| B                    | 0.3mm +/-0.1mm  |
| Case Code (EIA / mm) | 0402 / 1005     |

### Packaging Specifications

|                    |                        |
|--------------------|------------------------|
| Packaging          | T&R, 180mm, Paper Tape |
| Packaging Quantity | 10000                  |

### Specifications

|                                                                    |                                                 |
|--------------------------------------------------------------------|-------------------------------------------------|
| Capacitance                                                        | 220 pF                                          |
| Measurement Condition                                              | 1 kHz 1.0Vrms                                   |
| Tolerance                                                          | 5%                                              |
| Voltage DC                                                         | 50 VDC                                          |
| 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% 1 kHz 1.0Vrms                              |
| Aging Rate                                                         | 3% Loss/Decade Hour: Referee Time is 1000 Hours |
| Insulation Resistance                                              | 100 GOhms                                       |

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