

**KEMET Part Number: C0603C183K5RACTU**  
(C0603C183K5RAC7867)



SMD Comm X7R, Ceramic, 0.018 uF, 10%, 50 VDC, X7R, SMD, MLCC, Temperature Stable, Class II, 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

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

#### General Information

|              |                                         |
|--------------|-----------------------------------------|
| Series:      | SMD Comm X7R                            |
| Style:       | SMD Chip                                |
| Description: | SMD, MLCC, Temperature Stable, Class II |
| Features:    | Temperature Stable, Class II            |
| RoHS:        | Yes                                     |
| Termination: | Tin                                     |
| Marking:     | No                                      |
| AEC-Q200:    | No                                      |
| Shelf Life:  | 78 Weeks                                |
| MSL:         | 1                                       |

#### Specifications

|                                                                     |                                                 |
|---------------------------------------------------------------------|-------------------------------------------------|
| Capacitance:                                                        | 0.018 uF                                        |
| Measurement Condition:                                              | 1 kHz 1.0Vrms                                   |
| Capacitance Tolerance:                                              | 10%                                             |
| Voltage DC:                                                         | 50 VDC                                          |
| Dielectric Withstanding Voltage:                                    | 125 VDC                                         |
| Temperature Range:                                                  | -55/+125°C                                      |
| Temperature 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:                                              | 55.556 GOhms                                    |

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