

**KEMET Part Number: C0805C823K1RACTU**  
(C0805C823K1RAC7800)

SMD Comm X7R, Ceramic, 0.082 uF, 10%, 100 VDC, X7R, SMD, MLCC, Temperature Stable, Class II, 0805



**Dimensions**

|           |                 |
|-----------|-----------------|
| Chip Size | 0805            |
| L         | 2mm +/-0.2mm    |
| W         | 1.25mm +/-0.2mm |
| T         | 1mm +/-0.10mm   |
| S         | 0.75mm MIN      |
| B         | 0.5mm +/-0.25mm |

**Packaging Specifications**

|                     |                          |
|---------------------|--------------------------|
| Packaging:          | T&R, 180mm, Plastic Tape |
| Packaging Quantity: | 2500                     |

**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  |
| Miscellaneous: | Note: Referee time for X7R dielectric for this part number is 1000 hours. |
| Shelf Life:    | 78 Weeks  |
| MSL:           | 1   |

**Specifications**

|   |                     |
|---|---------------------|
| Capacitance:  | 0.082 uF            |
| Measurement Condition:  | 1 kHz 1.0Vrms       |
| Capacitance Tolerance:  | 10%                 |
| Voltage DC:   | 100 VDC             |
| Dielectric Withstanding Voltage:                                    | 250 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% 1kHz 1.0Vrms   |
| Aging Rate:   | 3% Loss/Decade Hour |
| Insulation Resistance:  | 12.195 GOhms        |