

**KEMET Part Number: C0603C820F5GACTU**  
(C0603C820F5GAC7867)

SMD Comm C0G, Ceramic, 82 pF, 1%, 50 VDC, C0G, SMD, MLCC, Ultra-Stable, Low Loss, Class I, 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 C0G   |
| Style:         | SMD Chip   |
| Description:   | SMD, MLCC, Ultra-Stable, Low Loss, Class I               |
| Features:      | Ultra-Stable, Low Loss, Class I                          |
| RoHS:          | Yes  |
| Termination:   | Tin  |
| Marking:       | No   |
| AEC-Q200:      | No   |
| Miscellaneous: | Note: KEMET 50V rated parts may be operated at 63 Volts. |
| Shelf Life:    | 78 Weeks   |
| MSL:           | 1  |

**Specifications**

|   |                        |
|---|------------------------|
| Capacitance:  | 82 pF                  |
| Measurement Condition:  | 1 mHz 1.0Vrms          |
| Capacitance Tolerance:  | 1%                     |
| Voltage DC:   | 50 VDC                 |
| Dielectric Withstanding Voltage:                                    | 125 VDC                |
| Temperature Range:  | -55/+125°C             |
| Temperature Coefficient:  | C0G                    |
| Capacitance Change with Reference to +25°C and 0 VDC Applied (TCC): | 30 ppm/C, 1MHz 1.0Vrms |
| Dissipation Factor:   | 0.1% 1MHz 1.0Vrms      |
| Aging Rate:   | 0% Loss/Decade Hour    |
| Insulation Resistance:  | 100 GOhms              |