

**KEMET Part Number: C0603T180J5GACTU**  
(C0603T180J5GAC7867)

SMD COTS COG, Ceramic, 18 pF, 5%, 50 VDC, COG, SMD, MLCC, COTS, 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**

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

**General Information**

|                       |  |
|-----------------------|--|
| <b>Series:</b>        | SMD COTS COG   |
| <b>Style:</b>         | SMD Chip   |
| <b>Description:</b>   | SMD, MLCC, COTS, Ultra-Stable, Low Loss, Class I         |
| <b>Features:</b>      | Ultra-Stable, Low Loss, Class I                          |
| <b>RoHS:</b>          | Yes  |
| <b>Termination:</b>   | Tin  |
| <b>Marking:</b>       | No   |
| <b>Failure Rate:</b>  | Testing per MIL-PRF-55681 PDA 8%                         |
| <b>AEC-Q200:</b>      | No   |
| <b>Miscellaneous:</b> | Note: KEMET 50V rated parts may be operated at 63 Volts. |
| <b>Shelf Life:</b>    | 78 Weeks   |
| <b>MSL:</b>           | 1  |

**Specifications**

|  |                           |
|--|---------------------------|
| <b>Capacitance:</b>  | 18 pF                     |
| <b>Measurement Condition:</b>  | 1 MHz 1.0Vrms             |
| <b>Capacitance Tolerance:</b>  | 5%                        |
| <b>Voltage DC:</b>   | 50 VDC                    |
| <b>Dielectric Withstanding Voltage:</b>                                    | 125 VDC                   |
| <b>Temperature Range:</b>  | -55/+125°C                |
| <b>Temperature Coefficient:</b>  | COG                       |
| <b>Capacitance Change with Reference to +25°C and 0 VDC Applied (TCC):</b> | 30 ppm/C, 1MegaHz 1.0Vrms |
| <b>Dissipation Factor:</b>   | 0.1% 1MegaHz 1.0Vrms      |
| <b>Aging Rate:</b>   | 0% Loss/Decade Hour       |
| <b>Insulation Resistance:</b>  | 100 GOhms                 |