

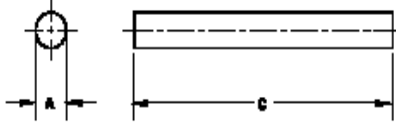
RFID Kit

(Part Number 019900024)

Antenna/RFID Kit Part No. 019900024 Ferrite Cores for Antenna Applications & RFID Devices



These precision-ground antenna rods, available in three materials, are designed for high Q applications over a wide frequency range, which encompasses the popular RFID operating frequencies.



78 Material for up to 500 kHz
61 Material for up to 10 MHz
67 Material for up to 75 MHz

| Part Number | A | C* | μ_{max} | Wt.(g) | Part Number | A | C* | μ_{max} | Wt.(g) |
|-------------|--------------------|-------------------|-------------|--------|--------------|-------------------|--------------------|-------------|--------|
| 3067990821 | 0.75±0.025 .030 | 7.5±0.15 .295 | 22 | .02 | 3061990861 | 2.5±0.025 .098 | 20.0±0.40 .787 | 27 | .47 |
| 3061990821 | 0.75±0.025 .030 | 7.5±0.15 .295 | 35 | .02 | 3078990861 | 2.5±0.025 .098 | 20.0±0.40 .787 | 34 | .47 |
| 3078990821 | 0.75±0.025 .030 | 7.5±0.15 .295 | 48 | .02 | 3067990871 | 3.0±0.04 .118 | 25.0±0.50 .984 | 20 | .85 |
| 3067990831 | 1.0±0.025 .039 | 10.0±0.20 .394 | 22 | .04 | 3061990871 | 3.0±0.04 .118 | 25.0±0.50 .984 | 29 | .85 |
| 3061990831 | 1.0±0.025 .039 | 10.0±0.20 .394 | 35 | .04 | 3078990871 | 3.0±0.04 .118 | 25.0±0.50 .984 | 35 | .85 |
| 3078990831 | 1.0±0.025 .039 | 10.0±0.20 .394 | 48 | .04 | 3067990881 | 4.0±0.04 .157 | 30.0±0.60 1.181 | 18 | 1.8 |
| 3067990841 | 1.5±0.025 .059 | 15.0±0.30 .591 | 22 | .13 | 3061990881 | 4.0±0.04 .157 | 30.0±0.60 1.181 | 25 | 1.8 |
| 3061990841 | 1.5±0.025 .059 | 15.0±0.30 .591 | 35 | .13 | 3078990881 | 4.0±0.04 .157 | 30.0±0.60 1.181 | 31 | 1.8 |
| 3078990841 | 1.5±0.025 .059 | 15.0±0.30 .591 | 48 | .13 | 3061990891 | 5.0±0.04 .197 | 35.0±0.70 1.378 | 24 | 3.3 |
| 3067990851 | 2.0±0.025 .079 | 15.0±0.30 .591 | 18 | .23 | 3078990891** | 5.0±0.04 .197 | 35.0±0.70 1.378 | 29 | 3.3 |
| 3061990851 | 2.0±0.025 .079 | 15.0±0.30 .591 | 25 | .23 | 3078990901** | 6.0±0.05 .236 | 40.0±0.80 1.575 | 25 | 5.4 |
| 3078990851 | 2.0±0.025 .079 | 15.0±0.30 .591 | 31 | .23 | 3078990911** | 6.0±0.05 .236 | 45.0±0.90 1.772 | 20 | 11 |
| 3067990861 | 2.5±0.025 .098 | 20.0±0.40 .787 | 19 | .47 | | | | | |

Dimensions (Bold numbers are in millimeters, light numbers are nominal in inches)

* This dimension may be modified to suit specific applications.

** Samples of rods in 61 & 67 materials are available from stock upon request.

| Property | Unit | Symbol | 67 | 61 | 78 |
|---|------------------|---------------------|------------|------------|------------|
| Initial Permeability @ B < 10 Gauss | --- | μ_j | 40 | 125 | 2300 |
| Flux Density @ Field Strength | gauss oersted | B H | 2300 20 | 2350 15 | 4800 5 |
| Loss Factor @ Frequency | 10^{-6} MHz | $\tan \delta/\mu_j$ | 150 50 | 30 1.0 | 4.5 0.1 |
| Temp Coefficient of Initial Perm (20 - 70 °C) | % / °C | TC | 0.05 | 0.10 | 1.0 |
| Curie Temperature | °C | T_c | >475 | >350 | >200 |

30--990871

