

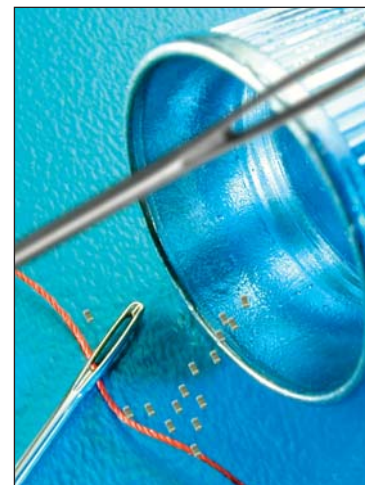
RF/Microwave COG (NP0) Capacitors (RoHS)



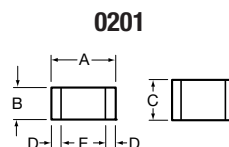
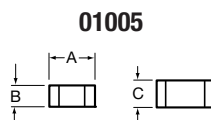
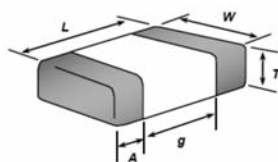
Ultra Low ESR, "CU" Series, COG (NP0) Chip Capacitors

GENERAL INFORMATION

"CU" Series capacitors are COG (NP0) chip capacitors specially designed for "Ultra" low ESR for applications in the communications market. Sizes available are EIA chip sizes 01005 and 0201.



DIMENSIONS:



mm (inches)

| Size | L (Length) | W (Width) | T (Max. Thickness) | g (min.) | A (Termination Min./Max.) |
|-----------------|-----------------------------|-----------------------------|-----------------------|-----------------|------------------------------|
| 0402 (01005) | 0.40±0.02 (0.016±0.0008) | 0.20±0.02 (0.008±0.0008) | 0.22 (0.009) | 0.13 (0.005) | 0.70/0.14 (0.003/0.006) |
| 0603 (0201) | 0.60±0.03 (0.024±0.001) | 0.30±0.03 (0.012±0.001) | 0.33 (0.013) | 0.15 (0.006) | 0.10/0.20 (0.004/0.008) |

HOW TO ORDER

| | | | | | | | | |
|---|---|---|--|---|--|--|---|--------------------------------|
| CU01 | 3 | 1 | 100 | J | A | T | 2 | A |
| Case Size CU10 = 01005 CU01 = 0201 | Voltage Code 3 = 25V Y = 16V | Dielectric 1 = 0±30ppm COG (NP0) | Capacitance EIA Capacitance Code in pF. First two digits = significant figures or "R" for decimal place. Third digit = number of zeros or after "R" significant figures. | Capacitance Tolerance Code A = ±0.05pF B = ±0.1pF C = ±0.25pF D = ±0.5pF G = ±2% J = ±5% | Failure Rate Code A = Not Applicable | Termination T = Plated Ni and Sn | Packaging Code 2 = 7" Reel 4 = 13" Reel U = 7" Reel 4mm TR (01005) | Special A = Standard |



ELECTRICAL CHARACTERISTICS

Capacitance Value Range:

Size 01005 0.2 to 24pF
Size 0201 0.2 to 24pF

Temperature Coefficient of Capacitance (TC):

0±30 ppm/°C (-55° to +125°C)

Insulation Resistance (IR):

10¹² Ω min. @ 25°C and rated WVDC
10¹¹ Ω min. @ 125°C and rated WVDC

Working Voltage (WVDC):

Size Working Voltage
01005 - 16V, 25V (0.2pF-10pF), 16V (10pF-24pF)
0201 - 25 WVDC

RF/Microwave C0G (NP0) Capacitors (RoHS)



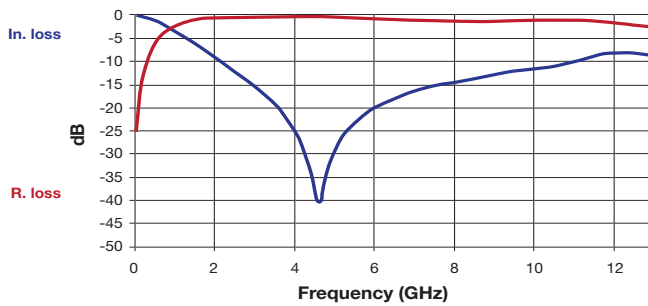
Ultra Low ESR, "CU" Series, C0G (NP0) Chip Capacitors

CAPACITANCE RANGE

| Cap (pF) | Available Tolerance | |
|----------|---------------------|-------|
| | 01005 | 0201 |
| 0.5 | B,C,D | B,C,D |
| 0.75 | B,C,D | B,C,D |
| 1.0 | B,C,D | B,C,D |
| 1.2 | B,C,D | B,C,D |
| 1.5 | B,C,D | B,C,D |
| 1.8 | B,C,D | B,C,D |
| 2.2 | B,C,D | B,C,D |
| 2.7 | B,C,D | B,C,D |
| 3.3 | B,C,D | B,C,D |
| 3.9 | B,C,D | B,C,D |
| 4.7 | B,C,D | B,C,D |
| 5.6 | B,C,D | C,D |
| 6.2 | B,C,D | C,D |
| 6.8 | B,C,D | D |
| 8.2 | B,C,D | D |
| 10.0 | G,J,K | J,K |
| 12.0 | G,J,K | J,K |
| 15.0 | G,J,K | J,K |
| 18.0 | G,J,K | J,K |
| 22.0 | G,J,K | J,K |
| 24.0 | G,J,K | J,K |

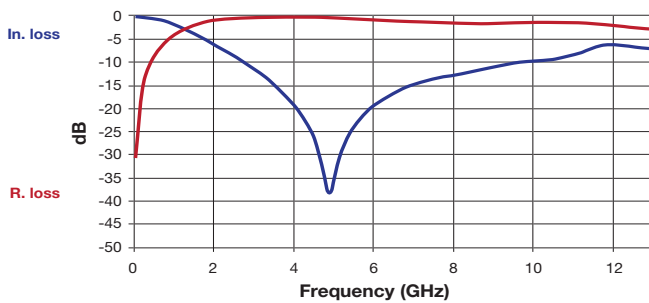
ULTRA LOW ESR, "CU" SERIES

01005 6.2pF



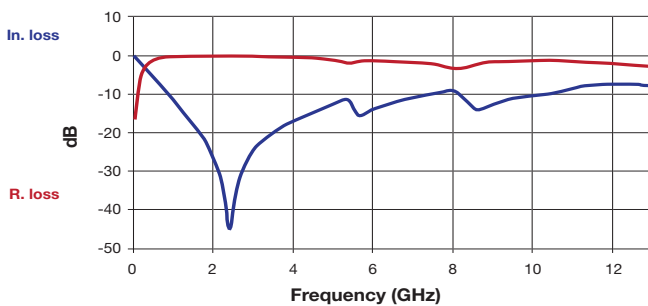
| | F (GHz) | IL | R. loss |
|----|---------|--------|---------|
| F1 | 0.31 | -0.40 | -9.68 |
| F2 | 1.28 | -5.03 | -1.44 |
| F3 | 2.408 | -11.58 | -0.27 |
| F4 | 4.635 | -40.55 | -0.39 |
| F5 | 4.897 | -31.82 | -0.47 |

0201 4.7pF



| | F (GHz) | IL | R. loss |
|----|---------|--------|---------|
| F1 | 0.31 | -0.13 | -12.90 |
| F2 | 1.28 | -2.89 | -2.84 |
| F3 | 2.408 | -8.09 | -0.60 |
| F4 | 4.635 | -29.45 | -0.37 |
| F5 | 4.897 | -38.55 | -0.45 |

0201 22pF



| | F (GHz) | IL | R. loss |
|----|---------|--------|---------|
| F1 | 0.31 | -2.90 | -2.85 |
| F2 | 1.28 | -15.26 | -0.10 |
| F3 | 2.408 | -45.65 | -0.10 |
| F4 | 4.635 | -14.90 | -0.87 |
| F5 | 4.897 | -12.89 | -1.08 |

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