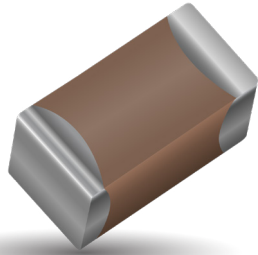


RF/Microwave Capacitors

RF/Microwave COG (NP0) Capacitors

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

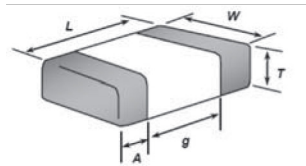


GENERAL INFORMATION

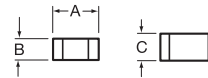
"CU" Series capacitors are COG (NP0) chip capacitors specially designed for "Ultra" low ESR for applications in the communications market. Sizes available are EIA chip sizes 01005 and 0201.



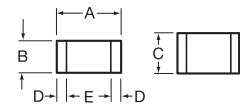
DIMENSIONS:



01005



0201



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

| Size | mm (inches) | | | | |
|-----------------|-----------------------------|-----------------------------|-----------------------|-----------------|------------------------------|
| | 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
Case Size
CU10 = 01005
CU01 = 0201

3
Voltage Code
3 = 25V
Y = 16V

1
Dielectric
1 = 0±30ppm
COG (NP0)

100
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.

J
Capacitance Tolerance Code
A = ±0.05pF
B = ±0.1pF
C = ±0.25pF
D = ±0.5pF
G = ±2%
J = ±5%

A
Failure Rate Code
A = Not Applicable

T
Termination
T = Plated Ni and Sn

2
Packaging Code
2 = 7" Reel
4 = 13" Reel
U = 7" Reel 4mm TR (01005)

A
Special
A = Standard



RF/Microwave Capacitors

RF/Microwave C0G (NP0) Capacitors

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

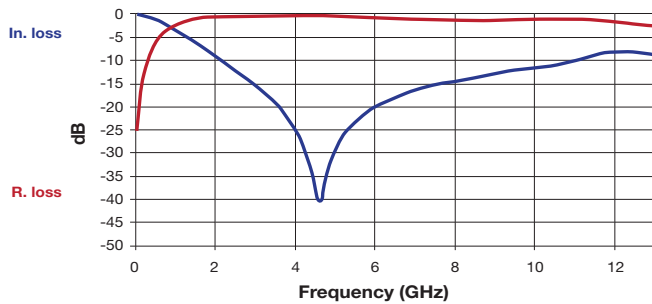


CAPACITANCE RANGE

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

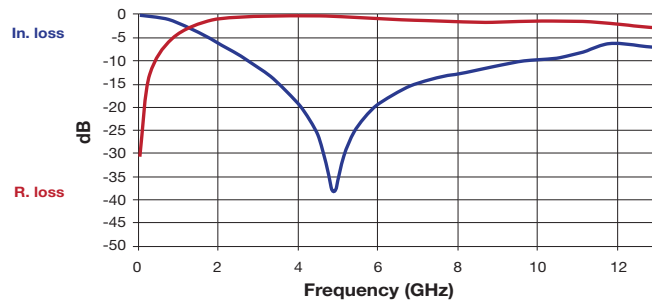
ULTRA LOW ESR, "CU" SERIES0

01005 6.2pF



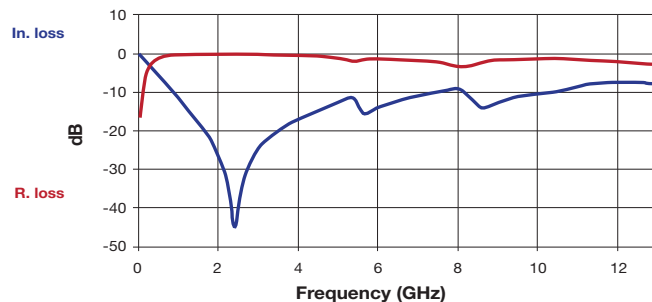
| | F (GHz) | IL | R. loss |
|----|---------|--------|---------|
| F1 | 0.31 | -0.40 | -9.68 |
| F2 | 1.28 | -5.03 | -1.44 |
| F3 | 2.408 | -11.58 | -0.27 |
| F4 | 4.635 | -40.55 | -0.39 |
| F5 | 4.897 | -31.82 | -0.47 |

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 |