

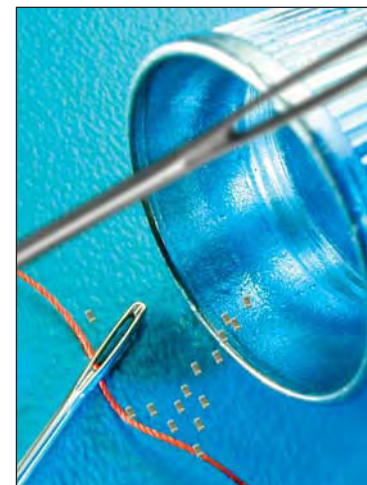
# RF/Microwave COG (NP0) Capacitors (RoHS)



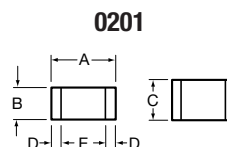
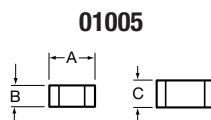
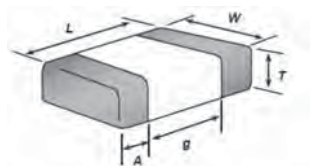
## Ultra Low ESR, "CU" Series, COG (NP0) Chip Capacitors

### 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

<b>CU01</b>	<b>3</b>	<b>1</b>	<b>100</b>	<b>J</b>	<b>A</b>	<b>T</b>	<b>2</b>	<b>A</b>
<b>Case Size</b> CU10 = 01005 CU01 = 0201	<b>Voltage Code</b> 3 = 25V Y = 16V	<b>Dielectric</b> 1 = 0±30ppm COG (NP0)	<b>Capacitance</b> 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.	<b>Capacitance Tolerance Code</b>  B = ±0.1pF C = ±0.25pF D = ±0.5pF G = ±2% J = ±5%	<b>Failure Rate Code</b> A = Not Applicable	<b>Termination</b> T = Plated Ni and Sn	<b>Packaging Code</b> 2 = 7" Reel 4 = 13" Reel U = 7" Reel 4mm TR (01005)	<b>Special</b> A = Standard



### ELECTRICAL CHARACTERISTICS

#### Capacitance Value Range:

Size 01005 0.5 to 6.2pF  
Size 0201 0.5 to 22pF

#### Temperature Coefficient of Capacitance (TC):

0±30 ppm/°C (-55° to +125°C)

#### Insulation Resistance (IR):

10<sup>12</sup> Ω min. @ 25°C and rated WVDC  
10<sup>11</sup> Ω min. @ 125°C and rated WVDC

#### Working Voltage (WVDC):

Size Working Voltage  
01005 - 16 WVDC  
0201 - 25 WVDC

# RF/Microwave C0G (NP0) Capacitors (RoHS)



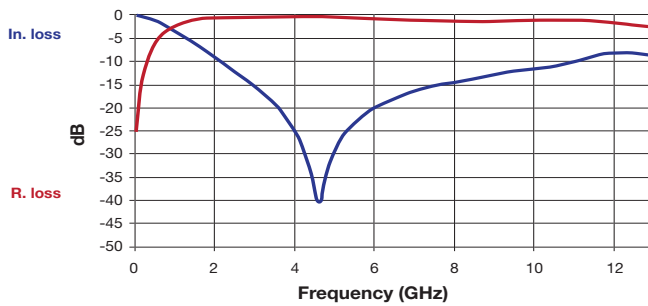
## Ultra Low ESR, "CU" Series, C0G (NP0) Chip Capacitors

### 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	C,D	C,D
6.2	C,D	C,D
6.8	C,D	D
8.2	C,D	D
10.0	C,D	J,K
12.0	C,D	J,K
15.0		
18.0		
22.0		J,K

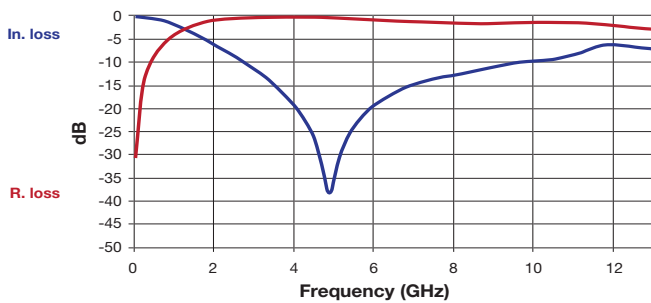
### ULTRA LOW ESR, "CU" SERIES

01005 6.2pF



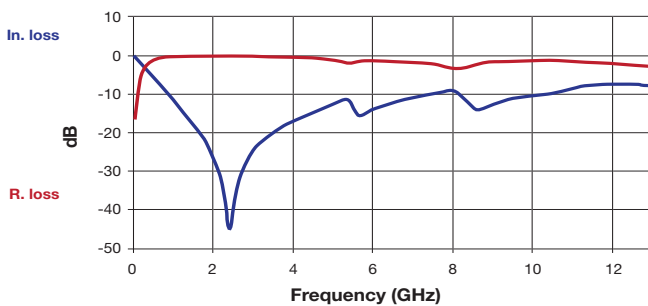
	F (GHz)	IL	R. loss
F1	0.31	-0.40	-9.68
F2	1.28	-5.03	-1.44
F3	2.408	-11.58	-0.27
F4	4.635	-40.55	-0.39
F5	4.897	-31.82	-0.47

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