RF/Microwave C0G (NP0) Capacitors (RoHS)

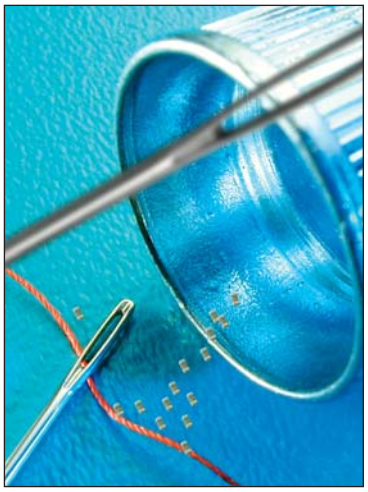
Ultra Low ESR, “CU” Series, C0G (NP0) Chip Capacitors

GENERAL INFORMATION

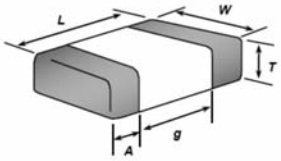
“CU” Series capacitors are C0G (NP0) chip capacitors specially designed for “Ultra” low ESR for applications in the communications market. Sizes available are EIA chip sizes 01005 and 0201.

LEAD-FREE
LEAD-FREE COMPATIBLE COMPONENT

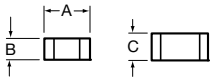
RoHS COMPLIANT



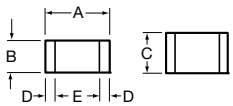
DIMENSIONS:



01005



0201



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 C0G (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** 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 0.5 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^{12} Ω min. @ 25°C and rated WVDC
10^{11} 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)

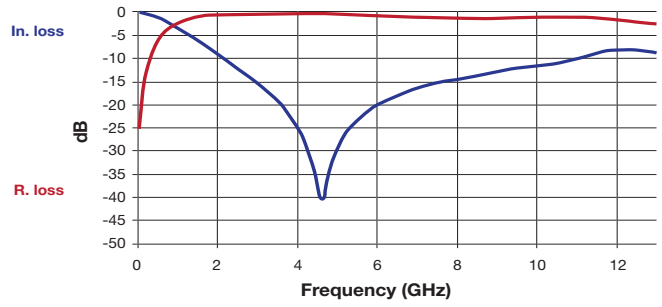
Ultra Low ESR, “CU” Series, C0G (NP0) Chip Capacitors

CAPACITANCE RANGE

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

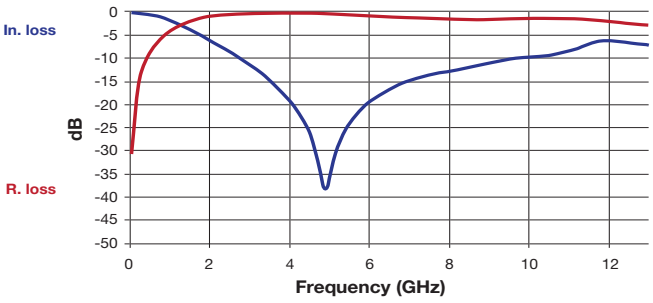
ULTRA LOW ESR, “CU” SERIES

01005 6.2pF



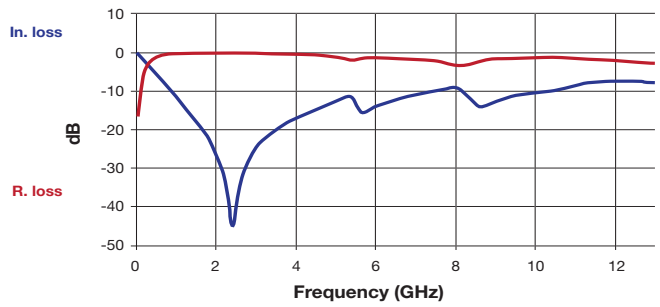
	F (GHz)	IL	R. loss
F1	0.31	-0.40	-9.68
F2	1.28	-5.03	-1.44
F3	2.408	-11.58	-0.27
F4	4.635	-40.55	-0.39
F5	4.897	-31.82	-0.47

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