

# RF/Microwave Capacitors

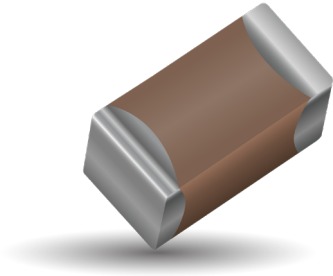
## RF/Microwave COG (NP0) Capacitors

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

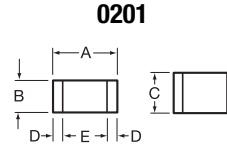
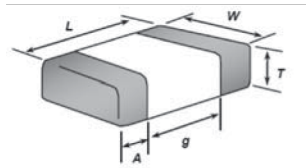


#### GENERAL INFORMATION

"CU" Series capacitors are COG (NP0) chip capacitors specially designed for "Ultra" low ESR for applications in the communications market.



#### DIMENSIONS:



#### ELECTRICAL CHARACTERISTICS

##### Capacitance Value Range:

Size 0201 0.2 to 24pF

##### 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

0201 - 25 WVDC

0201 - 50 WVDC

Size	mm (inches)				
	L (Length)	W (Width)	T (Max. Thickness)	g (min.)	A (Termination Min./Max.)
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  
CU01 = 0201

**3**  
Voltage Code  
3 = 25V  
5 = 50V

**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  
J = ±5%  
K = ±10%

**A**  
Failure Rate Code  
A = Not Applicable

**T**  
Termination  
T = Plated Ni and Sn

**2**  
Packaging Code  
2 = 7" Reel  
4 = 13" Reel

**A**  
Special  
A = Standard



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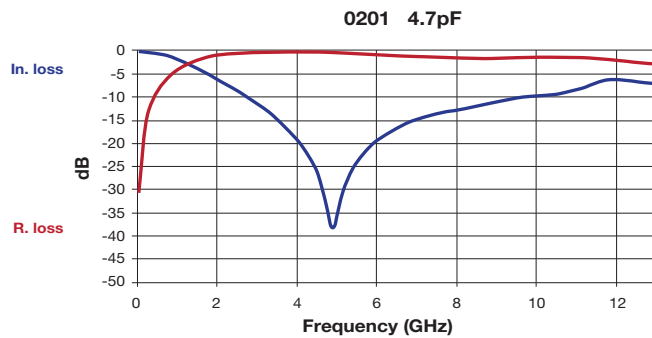
### Ultra Low ESR "CU" Series, COG (NP0) Capacitors (RoHS)



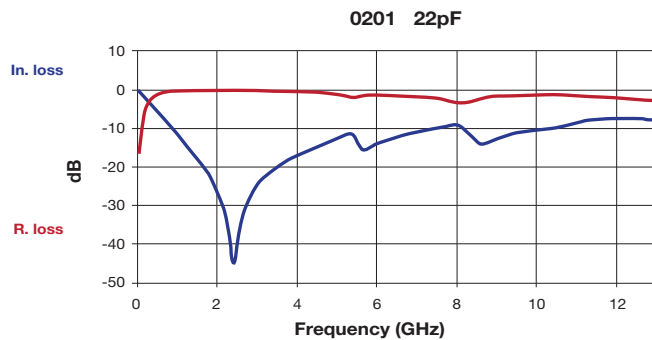
#### CAPACITANCE RANGE

Cap (pF)	Available Tolerance
0.2	0201
0.5	A,B,C,D
0.75	
1.0	
1.2	
1.5	
1.8	
2.1	
2.2	B,C,D
2.7	
3.3	
3.9	
4.7	B,C,D
5.6	B,C,D
6.2	C,D
6.8	C,D
8.2	D
10.0	D
12.0	J,K
15.0	
18.0	
22.0	
24.0	

#### ULTRA LOW ESR, "CU" SERIES0



	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



	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