

COG/COH MLCC for general-use

COG MLCC for General-use is class I high frequency capacitor, its capacitance is very stable, almost will not change along with the temperature, voltage and time.

Specially be suitable for high frequency circuits.

• Features

* The capacitance is very stable, its operating temperature is $-55^{\circ}\text{C}\sim 125^{\circ}\text{C}$, within the range, the temperature coefficient is $0\pm 30\text{ppm}/^{\circ}\text{C}$, $0\pm 60\text{ppm}/^{\circ}\text{C}$.

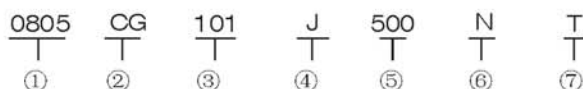
* It has multi-layer monolithic structure, has high reliability.

* It has good solderability and soldering resistance, suitable for flow/reflow soldering.

• Application

* It is suitable for all kinds of high frequency circuits.

• Product Part Number Expression



①Dimensions		
Type	British (Inch)	Metric (mm)
0402	0.04×0.02	1.00×0.50
0603	0.06×0.03	1.60×0.80
0805	0.08×0.05	2.00×1.25
1206	0.12×0.06	3.20×1.60

②Dielectric Type	
Code	Dielectric
CG	COG or NPO
CH	COH

③Normal Capacitance(PF)	
Expression Method	Actual Value
100	10×10^0
101	10×10^1
102	10×10^2

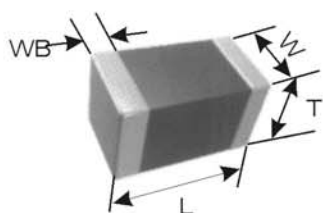
④Capacitance Tolerance	
Code	Tolerance
J	$\pm 5.00\%$
G	$\pm 2.00\%$
C	$\pm 0.25\text{PF}$
B	$\pm 0.10\text{PF}$
D	$\pm 0.50\text{PF}$

⑤Rated Voltage	
Expression Method	Actual Value
500	50V
250	25V
101	100V
201	200V

⑥Termination Type	
Expression Method	Termination Material
S	Pure Silver
C	Pure Copper
N	Three Layers Plating Terminal (Silver or Copper layer/ Nickel layer /Tin layer)

⑦Package Method	
Expression Method	Packaging
No Mark	Bulk Packaging in a Bag
T	Taping Packaging
B	Bulk Plastic Box Packaging

• Outside Dimension



Type		Dimension (mm)			
British Expression	Metric Expression	L	W	T	WB
0402	1005	1.00 ± 0.05	0.50 ± 0.05	0.50 ± 0.05	0.25 ± 0.10
0603	1608	1.60 ± 0.10	0.80 ± 0.10	0.80 ± 0.10	0.30 ± 0.10
0805	2012	2.00 ± 0.20	1.25 ± 0.20	0.80 ± 0.10 1.00 ± 0.10 1.25 ± 0.20	0.50 ± 0.25
1206	3216	3.20 ± 0.30	1.60 ± 0.20	0.80 ± 0.10 1.00 ± 0.10 1.25 ± 0.20	0.50 ± 0.25

Capacitance Range

Item	COG/COH MLCC for general-use																			
	0402					0603					0805					1206				
Dimension																				
Rated Voltage	6.3V	10V	16V	25V	50V	6.3V	10V	16V	25V	50V	6.3V	10V	16V	25V	50V	6.3V	10V	16V	25V	50V
Capacitance																				
0.5PF																				
1PF																				
2PF																				
3PF																				
4PF																				
5PF																				
6PF																				
7PF																				
8PF																				
10PF																				
15PF																				
18PF																				
22PF																				
33PF																				
47PF																				
68PF																				
100PF																				
120PF																				
150PF																				
180PF																				
220PF																				
330PF																				
470PF																				
560PF																				
680PF																				
1000PF																				
2200PF																				
2700PF																				
3300PF																				
4700PF																				
5600PF																				
6800PF																				

■ X7R MLCC for General-use

X7R MLCC for General-use is class II low frequency capacitor, its capacitance is stable.

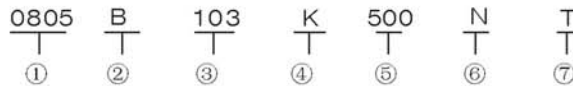
• Properties

- * The capacitance is stable, its operating temperature is $-55^{\circ}\text{C} \sim 125^{\circ}\text{C}$, within the range, the temperature coefficient is $\pm 15\%$.
- * It has multi-layer monolithic structure, has high reliability.
- * It has good solderability and soldering resistance, suitable for flow soldering/reflow soldering.

• Applications

It is suitable for all kinds of filter and coupling circuits.

• Product part number expression method



①Dimensions		
Type	British (Inch)	Metric (mm)
0402	0.04×0.02	1.00×0.50
0603	0.06×0.03	1.60×0.80
0805	0.08×0.05	2.00×1.25
1206	0.12×0.06	3.20×1.60

②Dielectric Type	
Code	Dielectric Material
B	X7R

③Normal Capacitance(PF)	
Expression Method	Actual Value
101	10×10^1
102	10×10^2
103	10×10^3

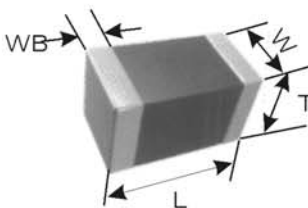
④Capacitance Tolerance	
Code	Tolerance
J	$\pm 5\%$
K	$\pm 10\%$
M	$\pm 20\%$

⑤Rated Voltage	
Expression Method	Actual Value
250	25V
500	50V
101	100V
201	200V

⑥Termination Type	
Expression Method	Termination Material
S	Pure Silver
C	Pure Copper
N	Three Layers Plating Terminal (Silver or Copper layer/ Nickel layer/ Tin layer)

⑦Package Method	
Expression Method	Packaging
No Mark	Bulk Packaging in a Bag
T	Taping Packaging
B	Bulk Plastic Box Packaging

• Outside Dimension



Type		Dimension (mm)			
British expression	Metric expression	L	W	T	WB
0402	1005	1.00 ± 0.05	0.50 ± 0.05	0.50 ± 0.05	0.25 ± 0.10
0603	1608	1.60 ± 0.10	0.80 ± 0.10	0.80 ± 0.10	0.30 ± 0.10
0805	2012	2.00 ± 0.20	1.25 ± 0.20	0.80 ± 0.10 1.00 ± 0.10 1.25 ± 0.20	0.50 ± 0.25
1206	3216	3.20 ± 0.30	1.60 ± 0.20	0.80 ± 0.10 1.00 ± 0.10 1.25 ± 0.20	0.50 ± 0.25

• Capacitance Range

Item	X7R MLCC for General-use																			
Dimension	0402					0603					0805					1206				
Rated Volatage	6.3V	10V	16V	25V	50V	6.3V	10V	16V	25V	50V	6.3V	10V	16V	25V	50V	6.3V	10V	16V	25V	50V
Capacitance																				
100PF																				
330PF																				
470PF																				
680PF																				
1000PF																				
1.5nF																				
2.2nF																				
3.3nF																				
4.7nF																				
6.8nF																				
10nF																				
12nF																				
15nF																				
22nF																				
27nF																				
33nF																				
39nF																				
47nF																				
56nF																				
68nF																				
100nF																				
150nF																				
220nF																				
270nF																				
330nF																				
470nF																				
680nF																				
1 μ F																				
2.2 μ F																				
4.7 μ F																				
10 μ F																				
22 μ F																				

Y5V MLCC for General-use

Y5V MLCC for General-use is class II low frequency capacitor, its capacitance will change a lot along with the temperature, voltage, time.

• Features

- * Its operating temperature is $-25^{\circ}\text{C}\sim 85^{\circ}\text{C}$, within the range, the temperature coefficient is $+30\%$, -80% .
- * It has multi-layer monolithic structure, has high reliability.
- * It has good solderability and soldering resistance, suitable for flow soldering/reflow soldering.

• Applications

It is suitable for all kinds of filter circuits.

• Product Part Number Expression



①Dimensions		
Type	British (Inch)	Metric (mm)
0402	0.04×0.02	1.00×0.50
0603	0.06×0.03	1.60×0.80
0805	0.08×0.05	2.00×1.25
1206	0.12×0.06	3.20×1.60

②Dielectric Type	
Code	Dielectric
F	Y5V

③Normal Capacitance(PF)	
Expression Method	Actual Value
102	10×10^2
103	10×10^3
104	10×10^4

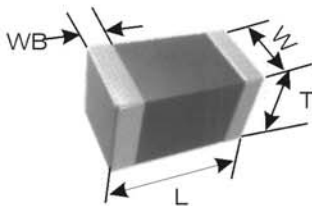
④Capacitance Tolerance	
Code	Tolerance
M	$\pm 20\%$
Z	$+80\%$ -20%

⑤Rated Voltage	
Expression Method	Actual Value
250	25V
500	50V
101	100V
201	200V

⑥Termination Type	
Expression Method	Termination Material
S	Pure Silver
C	Pure Copper
N	Three Layers Plating Terminal (Silver or Copper layer/ Nickel layer /Tin layer)

⑦Package Method	
Expression Method	Packaging
No Mark	Bulk Packaging in a Bag
T	Taping Packaging
B	Bulk Plastic Box Packaging

• Outside Dimension



Type		Dimension (mm)			
British expression	Metric expression	L	W	T	WB
0402	1005	1.00 ± 0.05	0.50 ± 0.05	0.50 ± 0.05	0.25 ± 0.10
0603	1608	1.60 ± 0.10	0.80 ± 0.10	0.80 ± 0.10	0.30 ± 0.10
0805	2012	2.00 ± 0.20	1.25 ± 0.20	0.80 ± 0.10 1.00 ± 0.10 1.25 ± 0.20	0.50 ± 0.25
1206	3216	3.20 ± 0.30	1.60 ± 0.20	0.80 ± 0.10 1.00 ± 0.10 1.25 ± 0.20	0.50 ± 0.25

• Capacitance Range

Item	Y5V MLCC for General-use																			
	0402					0603					0805					1206				
Dimension																				
Rated Volatage	6.3V	10V	16V	25V	50V	6.3V	10V	16V	25V	50V	6.3V	10V	16V	25V	50V	6.3V	10V	16V	25V	50V
Capacitance																				
1000PF	Shaded					Shaded					Shaded					White				
1.5nF	Shaded					Shaded					Shaded					White				
2.2nF	Shaded					Shaded					Shaded					White				
3.3nF	Shaded					Shaded					Shaded					White				
4.7nF	Shaded					Shaded					Shaded					White				
6.8nF	Shaded					Shaded					Shaded					White				
10nF	Shaded					Shaded					Shaded					White				
12nF	Shaded					Shaded					Shaded					Shaded				
15nF	Shaded					Shaded					Shaded					Shaded				
22nF	Shaded					Shaded					Shaded					Shaded				
27nF	Shaded					Shaded					Shaded					Shaded				
33nF	Shaded					Shaded					Shaded					Shaded				
39nF	Shaded					Shaded					Shaded					Shaded				
47nF	Shaded					Shaded					Shaded					Shaded				
56nF	Shaded					Shaded					Shaded					Shaded				
68nF	Shaded					Shaded					Shaded					Shaded				
100nF	Shaded					Shaded					Shaded					Shaded				
150nF	White					Shaded					Shaded					Shaded				
220nF	White					Shaded					Shaded					Shaded				
270nF	White					Shaded					Shaded					Shaded				
330nF	White					Shaded					Shaded					Shaded				
470nF	White					Shaded					Shaded					Shaded				
680nF	White					Shaded					Shaded					Shaded				
1 μ F	White					Shaded					Shaded					Shaded				
2.2 μ F	White					Shaded					Shaded					Shaded				
4.7 μ F	White					Shaded					Shaded					Shaded				
10 μ F	White					Shaded					Shaded					Shaded				
22 μ F	White					Shaded					Shaded					Shaded				
33 μ F	White					Shaded					Shaded					Shaded				
47 μ F	White					Shaded					Shaded					Shaded				
100 μ F	White					Shaded					Shaded					Shaded				