

■ 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

0805	B	103	K	500	N	T
①	②	③	④	⑤	⑥	⑦

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

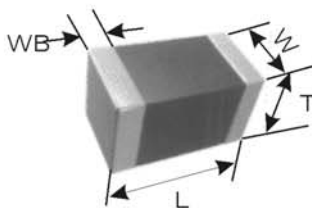
④Capacitance Tolerance	
Code	Tolerance
J	$\pm 5\%$
K	$\pm 10\%$
M	$\pm 20\%$

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																				