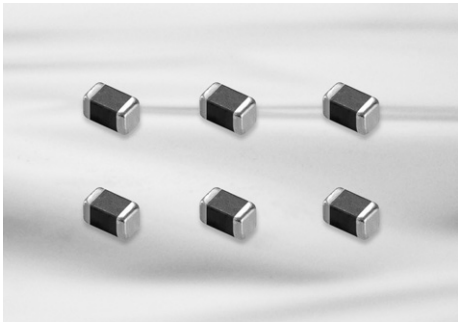


Feature

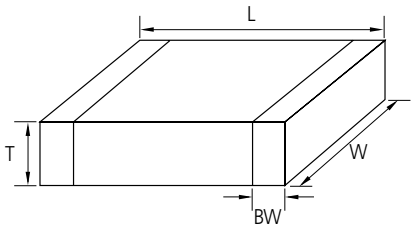
- Small chip size
- 03 Series(C0G) MLCC shows very low ESR value.
- 02 and 03 Series are suited to only reflow soldering
- 02 and 03 Series are suited to miniature RF module, portable equipment and high frequency circuit

Application

- VCO, Tuner, RF Module
- MCM Module
- Mobile phone, Wireless LAN, Note PC

※ For using special purpose like Military, Medical, Aviation, Automobile device should be following a special specification.

Structure and Dimensions



Code	EIA Code	Dimension(mm)			
		L	W	T	BW
02	01005	0.4±0.02	0.2±0.02	0.2±0.02	0.07~0.14
03	0201	0.6±0.03	0.3±0.03	0.3±0.03	0.15±0.05

* Note : This catalog has only typical specifications because there is no space for detailed specifications.
Please approve our product specifications or transact the approval sheet for product specifications before ordering.

Super Small Size Capacitance Table (C0G)

TC	Size (mm)	Vr(V)	Capacitance (pF) 0.5	1	10	22	47	100	220	330
C0G	01005(0402)	6.3						■		
		16			■	■	■	■		
	0201(0603)	25				■	■	■		
		50			■	■	■	■		

Super Small Size Capacitance Table (X7R,X6S)

TC	Size (mm)	Vr(V)	Capacitance (nF) 0.1	0.22	0.47	1	2.2	3.3	4.7	10
X7R	01005(0402)	10	■	■	■	■				
	0201(0603)	10					■	■	■	■
		16			■	■	■	■		
		25			■	■				
		50			■	■				
X6S	0201(0603)	4	■							

Super Small Size Capacitance Table (X5R, Y5V)

TC	Size (mm)	Vr(V)	Capacitance (μF) 0.01	0.1	0.22	0.47	1	2.2	4.7	10
X5R	01005(0402)	6.3	■	■						
		10	■							
		16	■							
	0201(0603)	4		X5R or X6S	■	■	■	■		
		6.3		■	■	■	■	■		
		10		■	■	■	■			
		16		■	■					
		25		■	■					
Y5V	0201(0603)	6.3		■	■					

Product Lineup (Super Small Size Capacitors -C0G)

	Part Number	Size L×W (mm)	Capacitance	Rated Voltage (Vdc)	Capacitance Tolerance	Thickness Max. (mm)	
1	CL02C0R5CO2ANN □	0.40×0.20	0.5pF	16	±0.25pF	0.22	
2	CL02C010CO2ANN □		1.0pF	16	±0.25pF	0.22	
3	CL02C1R2CO2ANN □		1.2pF	16	±0.25pF	0.22	
4	CL02C1R5CO2ANN □		1.5pF	16	±0.25pF	0.22	
5	CL02C1R8CO2ANN □		1.8pF	16	±0.25pF	0.22	
6	CL02C020CO2ANN □		2.0pF	16	±0.25pF	0.22	
7	CL02C2R2CO2ANN □		2.2pF	16	±0.25pF	0.22	
8	CL02C2R7CO2ANN □		2.7pF	16	±0.25pF	0.22	
9	CL02C030CO2ANN □		3.0pF	16	±0.25pF	0.22	
10	CL02C3R3CO2ANN □		3.3pF	16	±0.25pF	0.22	
11	CL02C3R9CO2ANN □		3.9pF	16	±0.25pF	0.22	
12	CL02C4R7CO2ANN □		4.7pF	16	±0.25pF	0.22	
13	CL02C5R6DO2ANN □		5.6pF	16	±0.5pF	0.22	
14	CL02C6R8DO2ANN □		6.8pF	16	±0.5pF	0.22	
15	CL02C8R2DO2ANN □		8.2pF	16	±0.5pF	0.22	
16	CL02C090DO2ANN □		9.0pF	16	±0.5pF	0.22	
17	CL02C100JO2ANN □		10pF	16	±5%	0.22	
18	CL02C150JO2ANN □		15pF	16	±5%	0.22	
19	CL02C180JO2ANN □		18pF	16	±5%	0.22	
20	CL02C220JO2ANN □		22pF	16	±5%	0.22	
21	CL02C270JO2ANN □		27pF	16	±5%	0.22	
22	CL02C330JO2ANN □		33pF	16	±5%	0.22	
23	CL02C390JO2ANN □		39pF	16	±5%	0.22	
24	CL02C470JO2ANN □		47pF	16	±5%	0.22	
25	CL02C560JQ2ANN □		56pF	6.3	±5%	0.22	
26	CL02C680JQ2ANN □		68pF	6.3	±5%	0.22	
27	CL02C820JQ2ANN □		82pF	6.3	±5%	0.22	
28	CL02C101JO2ANN □		100pF	16	±5%	0.22	
29	CL02C101JQ2ANN □		100pF	6.3	±5%	0.22	
1	CL03C0R5CA3GNN □	0.60×0.30	0.5pF	25	±0.25pF	0.33	High-Q
2	CL03C010CA3GNN □		1.0pF	25	±0.25pF	0.33	High-Q
3	CL03C1R2CA3GNN □		1.2pF	25	±0.25pF	0.33	High-Q
4	CL03C1R5CA3GNN □		1.5pF	25	±0.25pF	0.33	High-Q
5	CL03C1R8CA3GNN □		1.8pF	25	±0.25pF	0.33	High-Q
6	CL03C020CA3GNN □		2.0pF	25	±0.25pF	0.33	High-Q
7	CL03C2R2CA3GNN □		2.2pF	25	±0.25pF	0.33	High-Q
8	CL03C2R7CA3GNN □		2.7pF	25	±0.25pF	0.33	High-Q
9	CL03C030CA3GNN □		3.0pF	25	±0.25pF	0.33	High-Q
10	CL03C3R3CA3GNN □		3.3pF	25	±0.25pF	0.33	High-Q
11	CL03C3R9CA3GNN □		3.9pF	25	±0.25pF	0.33	High-Q
12	CL03C4R7CA3GNN □		4.7pF	25	±0.25pF	0.33	High-Q
13	CL03C5R6DA3GNN □		5.6pF	25	±0.5pF	0.33	High-Q
14	CL03C6R8DA3GNN □		6.8pF	25	±0.5pF	0.33	High-Q
15	CL03C8R2DA3GNN □		8.2pF	25	±0.5pF	0.33	High-Q
16	CL03C090DA3GNN □		9.0pF	25	±0.5pF	0.33	High-Q
17	CL03C100JA3GNN □		10pF	25	±5%	0.33	High-Q
18	CL03C150JA3ANN □		15pF	25	±5%	0.33	
19	CL03C180JA3ANN □		18pF	25	±5%	0.33	
20	CL03C220JA3ANN □		22pF	25	±5%	0.33	
21	CL03C270JA3ANN □		27pF	25	±5%	0.33	
22	CL03C330JA3ANN □		33pF	25	±5%	0.33	
23	CL03C390JA3ANN □		39pF	25	±5%	0.33	
24	CL03C470JA3ANN □		47pF	25	±5%	0.33	
25	CL03C101JB3ANN □		100pF	50	±5%	0.33	
26	CL03C101JA3ANN □		100pF	25	±5%	0.33	

※ □mark means packaging code. If you want to learn the code or quantity in detail, please see p80.

Product Lineup (Super Small Size Capacitors -X7R,X65)

	Part Number	Size L×W (mm)	Capacitance	Rated Voltage (Vdc)	Capacitance Tolerance	Thickness Max. (mm)
1	CL02B101KP2NNN □	0.40×0.20	100pF	10	±10%	0.22
2	CL02B151KP2NNN □		150pF	10	±10%	0.22
3	CL02B221KP2NNN □		220pF	10	±10%	0.22
4	CL02B331KP2NNN □		330pF	10	±10%	0.22
5	CL02B471KP2NNN □		470pF	10	±10%	0.22
6	CL02B681KP2NNN □		680pF	10	±10%	0.22
7	CL02B102KP2NNN □		1nF	10	±10%	0.22
1	CL03B331KO3NNN □	0.60×0.30	330pF	16	±10%	0.33
2	CL03B102KB3NNN □		1nF	50	±10%	0.33
3	CL03B102KO3NNN □		1nF	16	±10%	0.33
4	CL03B332KO3NNN □		3.3nF	16	±10%	0.33
5	CL03B472KQ3NNN □		4.7nF	6.3	±10%	0.33
6	CL03B103KP3NNN □		10nF	10	±10%	0.33
7	CL03X104KR3NNN □		100nF	4	±10%	0.33

Product Lineup (Super Small Size Capacitors -X5R)

	Part Number	Size L×W (mm)	Capacitance	Rated Voltage (Vdc)	Capacitance Tolerance	Thickness Max. (mm)
1	CL02A151KQ2NNN □	0.40×0.20	150pF	6.3	±10%	0.22
2	CL02A221KQ2NNN □		220pF	6.3	±10%	0.22
3	CL02A331KQ2NNN □		330pF	6.3	±10%	0.22
4	CL02A471KQ2NNN □		470pF	6.3	±10%	0.22
5	CL02A681KQ2NNN □		680pF	6.3	±10%	0.22
6	CL02A102KQ2NNN □		1nF	6.3	±10%	0.22
7	CL02A152KQ2NNN □		1.5nF	6.3	±10%	0.22
8	CL02A222KQ2NNN □		2.2nF	6.3	±10%	0.22
9	CL02A332KQ2NNN □		3.2nF	6.3	±10%	0.22
10	CL02A472KQ2NNN □		4.7nF	6.3	±10%	0.22
11	CL02A682KQ2NNN □		6.8nF	6.3	±10%	0.22
12	CL02A103KQ2NNN □		10nF	6.3	±10%	0.22
13	CL02A104KQ2NNN □		100nF	6.3	±10%	0.22
1	CL03A103KP3NNN □	0.60×0.30	10nF	10	±10%	0.33
2	CL03A223KQ3NNN □		22nF	6.3	±10%	0.33
3	CL03A473KQ3NNN □		47nF	6.3	±10%	0.33
4	CL03A104MA3NNN □		100nF	25	±20%	0.33
5	CL03A104KO3NNN □		100nF	16	±10%	0.33
6	CL03A104KP3NNN □		100nF	10	±10%	0.33
7	CL03A104KQ3NNN □		100nF	6.3	±10%	0.33
8	CL03A224KQ3NNN □		220nF	6.3	±10%	0.33
9	CL03A224KP3NNN □		220nF	10	±10%	0.33
10	CL03A105MQ3CSN □		1μF	6.3	±20%	0.35
11	CL03A105MP3NSN □		1μF	10	±20%	0.35
12	CL03A225MR3CRN □		2.2μF	4	±20%	0.39
13	CL03A225MQ3CRN □		2.2μF	6.3	±20%	0.39

※ □mark means packaging code. If you want to learn the code or quantity in detail, please see p80.