

Dimensions Table

Size [Inch (mm)]	Thickness (mm)/Symbol	
0201 (0603)	0.30 ±0.3	L
0401 (1005)	0.50 ±0.05	N
0603 (1608)	0.80 ±0.07	S
	0.80 + 0.15/-0.10	X
0805 (2012)	0.60 ±0.10	A
	0.80 ±0.10	B
	1.25 ±0.10	D
1206 (3216)	0.80 ±0.10	B
	0.95 ±0.10	C
	1.15 ±0.15	J
	1.25 ±0.10	D
	1.60 ±0.20	G
	1.60 + 0.30/-0.10	P

Dimensions : Inches (Millimetres)

Capacitance Range (NP0)

Dielectric	NP0	
Size	0201	
Rated Voltage (V dc)	16 (V)	25 (V)
0.3pF (0R3)	-	L
0.4pF (0R4)	-	
0.5pF (0R5)	-	
1.0pF (1R0)	-	
1.2pF (1R2)	-	
1.5pF (1R5)	-	
1.8pF (1R8)	-	

Capacitance Range (NP0)

Dielectric	NP0	
Size	0201	
Rated Voltage (V dc)	16 (V)	25 (V)
2.2pF (2R2)	-	L
2.7pF (2R7)	-	
3.3pF (3R3)	-	
3.9pF (3R9)	-	
4.7pF (4R7)	-	
5.6pF (5R6)	-	
6.8pF (6R8)	-	
8.2pF (8R2)	-	
10pF (100)	-	
12pF (120)	-	
15pF (150)	-	
18pF (180)	-	
22pF (220)	-	
27pF (270)	-	
33pF (330)	-	
39pF (390)	-	
47pF (470)	-	
56pF (560)	L	
68pF (680)		
82pF (820)		
100pF (101)		

1. The letter in cell is expressed the symbol of product thickness.

Capacitance Range (X7R and X5R)

Dielectric	X7R			X5R	
Size	0201				
Rated Voltage (V dc)	10 (V)	16 (V)	25 (V)	6.3 (V)	10 (V)
100pF (101)	-	L	L	-	-
120pF (121)	-			-	-
150pF (151)	-			-	-
180pF (181)	-			-	-
220pF (221)	-			-	-

Capacitance Range (X7R and X5R)

Dielectric	X7R			X5R	
Size	0201				
Rated Voltage (V dc)	10 (V)	-16 (V)	25 (V)	6.3 (V)	10 (V)
270pF (271)	-	L	L	-	-
330pF (331)	-			-	-
390pF (391)	-			-	-
470pF (471)	-			-	-
560pF (561)	-			-	-
680pF (681)	-			-	-
820pF (821)	-			-	-
1000pF (102)	-			-	-
1500pF (152)	L		-	-	-
2200pF (222)			-	-	-
3300pF (332)			-	-	-
4700pF (472)			-	-	-
6800pF (682)		-	-	L	
0.010μF (103)		-	-		
0.015μF (153)	-	-	-		
0.022μF (223)	-	-	-		
0.033μF (333)	-	-	-		
0.047μF (473)	-	-	-		
0.068μF (683)	-	-	-	-	
0.10μF (104)	-	--	-	-	

1. The letter in cell is expressed the symbol of product thickness.

Capacitance Range (NP0)

Dielectric	NP0					
Size	0402	0603		0805		1206
Rated Voltage (V dc)	50 (V)	50 (V)	100 (V)	50 (V)	100 (V)	50 (V)
0.5pF (0R5)	N	S	S	A	A	-
0.6pF (0R6)						-
0.7pF (0R7)						-
0.8pF (0R8)						-
09pF (0R9)						-
1.0pF (1R0)						-
1.2pF (1R2)						-
1.5pF (1R5)						B

Capacitance Range (NP0)

Dielectric	NP0					
Size	0402	0603		0805		1206
Rated Voltage (V dc)	50 (V)	50 (V)	100 (V)	50 (V)	100 (V)	50 (V)
1.8pF (1R8)	N	S	S	A	A	B
2.2pF (2R2)						
2.7pF (2R2)						
3.3pF (3R3)						
3.9pF (3R9)						
4.7pF (4R7)						
5.6pF (5R6)						
6.8pF (6R8)						
8.2pF (8R2)						
10pF (100)						
12pF (120)						
15pF (150)						
18pF (180)						
22pF (220)						
27pF (270)						
33pF (330)						
39pF (390)						
47pF (470)						
56pF (560)						
68pF (680)						
82pF (820)						
100pF (101)						
120pF (121)						
150pF (151)						
180pF (181)						
220pF (221)						
270pF (271)	-	S	S	B	B	B
330pF (331)	-					
390pF (391)	-					
470pF (471)	-					
560pF (561)	-					
680pF (681)	-					
820pF (821)	-					
1000pF (102)	-					
1200pF (122)	-					

Capacitance Range (NP0)

Dielectric	NP0						
Size	0402	0603		0805		1206	
Rated Voltage (V dc)	50 (V)	50 (V)	100 (V)	50 (V)	100 (V)	50 (V)	
1500pF (152)	-	-	-	B	B	B	
1800pF (182)	-	-	-				
2200pF (222)	-	-	-				
2700pF (272)	-	-	-	D	D		B
3300pF (332)	-	-	-				
3900pF (392)	-	-	-		-		
4700pF (472)	-	-	-				
5600pF (562)	-	-	-	-	-	C	
6800pF (682)	-	-	-	-	-		
8200pF (822)	-	-	-	-	-	D	
0.010μF (103)	-	-	-	-	-		
0.012μF (123)	-	-	-	-	-	-	
0.015μF (153)	-	-	-	-	-	-	
0.018μF (183)	-	-	-	-	-	-	
0.022μF (223)	-	-	-	-	-	-	
0.027μF (273)	-	-	-	-	-	-	
0.033μF (333)	-	-	-	-	-	-	
0.039μF (393)	-	-	-	-	-	-	

1. The letter in cell is expressed the symbol of product thickness.

Capacitance Range (X7R)

Dielectric	X7R														
Size	0402			0603				0805				1206			
Rated Voltage (V dc)	16 (V)	25 (V)	50 (V)	16 (V)	25 (V)	50 (V)	100 (V)	16 (V)	25 (V)	50 (V)	100 (V)	16 (V)	25 (V)	50 (V)	100 (V)
100pF (101)	-	-	N	-	-	S	S	-	-	B	B	-	-	-	-
120pF (121)	-	-		-	-			-	-			-	-		
150pF (151)	-	-		-	-			-	-			-	B	B	
180pF (181)	-	-		-	-			-	-			-			
220pF (221)	-	-		-	-			-	-			-			
270pF (271)	-	-		-	-			-	-			-			
330pF (331)	-	-		-	-			-	-			-			
390pF (391)	-	-		-	-			-	-			-			
470pF (471)	-	-		-	-			-	-			-			
560pF (561)	-	-		-	-			-	-			-			
680pF (681)	-	-		-	-			-	-			-			

Capacitance Range (X7R)

Dielectric	X7R														
Size	0402			0603				0805				1206			
Rated Voltage (V dc)	16 (V)	25 (V)	50 (V)	16 (V)	25 (V)	50 (V)	100 (V)	16 (V)	25 (V)	50 (V)	100 (V)	16 (V)	25 (V)	50 (V)	100 (V)
820pF (821)	-	-	N	-	-	S	S	-	-	B	B	-	-	B	B
1000pF (102)	-	-		-	-			-	-			-			
1200pF (122)	-	-		-	-			-	-			-			
1500pF (152)	-	-		-	-			-	-			-			
1800pF (182)	-	-		-	-			-	-			-			
2200pF (222)	-	-		-	-			-	-			-			
2700pF (332)	-	-		-	-			-	-			-			
3300pF (332)	-	-		-	-			-	-			-			
3900pF (392)	-	-		-	-			-	-			-			
4700pF (472)	-	-		-	-			-	-			-			
5600pF (562)	-	N	N	-	-	S	S	-	-	B	B	-	-	B	B
6800pF (682)	-			-	-			-	-			-	-		
8200pF (822)	-			-	-			-	-			-	-		
0.010µF (103)	-			-	-			-	-			-	-		
0.012µF (123)	N			-	-			-	-			-	-		
0.015µF (153)				-	-			-	-			-	-		
0.018µF (183)				-	-			-	-			-	-		
0.022µF (223)				-	-			-	-			-	-		
0.027µF (273)		-	-	-	-			-	-						
0.033µF (333)		-	-	-	-	-	-								
0.039µF (393)		-	-	-	-	-	-								
0.047µF (473)		-	-	-	-	-	-								
0.056µF (563)	-	-	-	S	X	-	-	-	D	-	-	C	G		
0.068µF (683)	-	-	-			-	-	-		-					
0.082µF (823)	-	-	S			-	-	B		-	-			-	-
0.10µF (104)	-	-				-	-			-	-			-	
0.12µF (124)	-	-		S	-	-	-		-	-	-	-			
0.15µF (154)	-	-	-		-	-	-	-	-	-					
0.18µF (184)	-	-	-		-	-	-	-	-	-					
0.22µF (224)	-	-	-		-	-	-	-	-	-					
0.27µF (274)	-	-	-	X	X	-	-	-	D	-	-	C	D	-	
0.33µF (334)	-	-	-			-	-	-		-	-			-	-
0.39µF (394)	-	-	-			-	-	D		-	-	C	J	P	-
0.47µF (474)	-	-	-			-	-			-	-	J			J
0.56µF (564)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Capacitance Range (X7R)

Dielectric	X7R														
Size	0402			0603				0805				1206			
Rated Voltage (V dc)	16 (V)	25 (V)	50 (V)	16 (V)	25 (V)	50 (V)	100 (V)	16 (V)	25 (V)	50 (V)	100 (V)	16 (V)	25 (V)	50 (V)	100 (V)
0.68μF(684)	-	-	-	-	-	-	-	D	D	-	-	J	J	P	-
0.82μF (824)	-	-	-	-	-	-	-			-	-				-
1.0μF(105)	-	-	-	-	-	-	-			-	-				-

1. The letter in cell is expressed the symbol of product thickness.

Capacitance Range (Y5V)

Dielectric	Y5V																							
Size	0402					0603				0805				1206										
Rated Voltage (V dc)	6.3 (V)	10 (V)	16 (V)	25 (V)	50 (V)	10 (V)	16 (V)	25 (V)	50 (V)	6.3 (V)	16 (V)	25 (V)	50 (V)	6.3 (V)	16 (V)	25 (V)	50 (V)	100 (V)						
0.010μF (103)	-	-	-	-	N	-	-	-	S	-	-	-	A	-	-	B	B	B						
0.015μF (153)	-	-	-	-		-	-	-		-	-	-		-										
0.022μF (223)	-	-	-	-		-	-	-		-	-	-		-										
0.033μF (333)	-	-	-	-		-	-	-		-	-	-		-										
0.047μF (473)	-	-	-	N		-	-	-		A	-	-		-	-			-	B	B	C			
0.068μF (683)	-	-	N			-	-	-			-	-		-	-			-						
0.10μF (104)	-	-				-	-	-			-	-		-	-			-						
0.15μF (154)	-	N	-	-		-	-	-			-	-		-	-			-				-	-	-
0.22μF (224)	-		-	-		-	-	S			-	-		-	-			-			-	-	-	-
0.33μF (334)	N		-	-		-	-					-	-	-	B			-	-	-	-	-		
0.47μF (474)			-	-		-	S	-				-	-	B				-	-	-	-	-		
0.68μF (684)			-	-	-		S	X			-		-	B	D			D	-	-	C	C	-	
1.0μF (105)			-	-	-						X	-				-	-		-	-			-	-

1. The letter in cell is expressed the symbol of product thickness.

Specification Table

Description	Dielectric	Size [Inch (mm)]	Rated Voltage (V dc)	Capacitance (nF, pF)	Part Number
MLCC, 0201, X5R, 6.3V, 10nF	X5R	0201	6.3	10nF	MCCA000000
MLCC, 0201, X5R, 6.3V, 15nF				15nF	MCCA000001
MLCC, 0201, X5R, 6.3V, 22nF				22nF	MCCA000002
MLCC, 0201, X5R, 6.3V, 33nF				33nF	MCCA000003
MLCC, 0201, X5R, 6.3V, 47nF				47nF	MCCA000004
MLCC, 0201, X5R, 6.3V, 68nF				68nF	MCCA000005
MLCC, 0201, X7R, 10V, 1nF	X7R		10	1nF	MCCA000006
MLCC, 0201, X7R, 10V, 1.5nF				1.5nF	MCCA000007
MLCC, 0201, X7R, 10V, 2.2nF				2.2nF	MCCA000008
MLCC, 0201, X5R, 10V, 3.3nF	X5R			3.3nF	MCCA000009
MLCC, 0201, X5R, 10V, 4.7nF				4.7nF	MCCA000010
MLCC, 0201, X5R, 10V, 6.8nF				6.8nF	MCCA000011
MLCC, 0201, X5R, 10V, 10nF				10nF	MCCA000012
MLCC, 0201, NP0, 16V, 56pF	NP0		16	56pF	MCCA000013
MLCC, 0201, NP0, 16V, 68pF				68pF	MCCA000014
MLCC, 0201, NP0, 16V, 82pF				82pF	MCCA000015
MLCC, 0201, NP0, 16V, 100pF				100pF	MCCA000016
MLCC, 0201, X7R, 16V, 1.5nF	X7R			1.5nF	MCCA000017
MLCC, 0201, X7R, 16V, 2.2nF				2.2nF	MCCA000018
MLCC, 0201, NP0, 25V, 0.5pF	NP0		25	0.5pF	MCCA000019
MLCC, 0201, NP0, 25V, 1pF				1pF	MCCA000020
MLCC, 0201, NP0, 25V, 1.5pF				1.5pF	MCCA000021
MLCC, 0201, NP0, 25V, 10pF				10pF	MCCA000022
MLCC, 0201, NP0, 25V, 12pF				12pF	MCCA000023
MLCC, 0201, NP0, 25V, 15pF				15pF	MCCA000024
MLCC, 0201, NP0, 25V, 18pF				18pF	MCCA000025
MLCC, 0201, NP0, 25V, 22pF				22pF	MCCA000026
MLCC, 0201, NP0, 25V, 27pF				27pF	MCCA000027

Dimensions : Inches (Millimetres)

Specification Table

Description	Dielectric	Size [Inch (mm)]	Rated Voltage (V dc)	Capacitance (pF, µF)	Part Number
MLCC, 0201, NP0, 25V, 33pF	NP0	0201	25	33pF (330)	MCCA000028
MLCC, 0201, X7R, 25V, 150pF	X7R			150pF (151)	MCCA000029
MLCC, 0201, X7R, 25V, 220pF				220pF (221)	MCCA000030
MLCC, 0201, X7R, 25V, 330pF				330pF (331)	MCCA000031
MLCC, 0201, X7R, 25V, 470pF				470pF (471)	MCCA000032
MLCC, 0201, X7R, 25V, 680pF				680pF (681)	MCCA000033
MLCC, 0201, X7R, 25V, 1nF				1,000pF (102)	MCCA000034
MLCC, 0402, Y5V, 6.3V, 1µF	Y5V	0402 (1005)	6.3	1.0µF (105)	MCCA000035
MLCC, 0402, Y5V, 10V, 220nF	X7R		10	0.22µF (224)	MCCA000036
MLCC, 0402, X7R, 16V, 5.6nF			16	5,600pF (562)	MCCA000037
MLCC, 0402, X7R, 16V, 6.8nF				6,800pF (682)	MCCA000038
MLCC, 0402, X7R, 16V, 8.2nF				8,200pF (822)	MCCA000039
MLCC, 0402, X7R, 16V, 10nF				0.010µF (103)	MCCA000040
MLCC, 0402, X7R, 16V, 12nF				0.012µF (123)	MCCA000041
MLCC, 0402, X7R, 16V, 15nF				0.015µF (153)	MCCA000042
MLCC, 0402, Y5V, 16V, 15nF	Y5V			MCCA000043	
MLCC, 0402, X7R, 16V, 18nF	X7R			0.018µF (183)	MCCA000044
MLCC, 0402, X7R, 16V, 22nF				0.022µF (223)	MCCA000045
MLCC, 0402, Y5V, 16V, 22nF	Y5V			0.022µF (223)	MCCA000046
MLCC, 0402, Y5V, 16V, 33nF				0.033µF (333)	MCCA000047
MLCC, 0402, Y5V, 16V, 47nF				0.047µF (473)	MCCA000048
MLCC, 0402, Y5V, 16V, 68nF				0.068µF (683)	MCCA000049
MLCC, 0402, X7R, 16V, 100nF	X7R			0.1µF (104)	MCCA000050
MLCC, 0402, Y5V, 16V, 100nF	Y5V				MCCA000051
MLCC, 0402, X7R, 25V, 100pF	X7R		25	100pF (101)	MCCA000052
MLCC, 0402, X7R, 25V, 120pF				120pF (121)	MCCA000053
MLCC, 0402, X7R, 25V, 150pF				150pF (151)	MCCA000054
MLCC, 0402, X7R, 25V, 180pF				180pF (181)	MCCA000055
MLCC, 0402, X7R, 25V, 220pF				220pF (221)	MCCA000056
MLCC, 0402, X7R, 25V, 270pF				270pF (271)	MCCA000057
MLCC, 0402, X7R, 25V, 330pF				330pF (331)	MCCA000058
MLCC, 0402, X7R, 25V, 390pF				390pF (391)	MCCA000059
MLCC, 0402, X7R, 25V, 470pF				470pF (471)	MCCA000060
MLCC, 0402, X7R, 25V, 560pF				560pF (561)	MCCA000061

Dimensions : Inches (Millimetres)

Specification Table

Description	Dielectric	Size [Inch (mm)]	Rated Voltage (V dc)	Capacitance (pF, μF)	Part Number
MLCC, 0402, X7R, 25V, 680pF	X7R	0402 (1005)	25	680pF (681)	MCCA000062
MLCC, 0402, X7R, 25V, 820pF				820pF (821)	MCCA000063
MLCC, 0402, X7R, 25V, 1nF				1,000pF (102)	MCCA000064
MLCC, 0402, X7R, 25V, 1.2nF				1,200pF (122)	MCCA000065
MLCC, 0402, X7R, 25V, 1.5nF				1,500pF (152)	MCCA000066
MLCC, 0402, X7R, 25V, 1.8nF				1,800pF (182)	MCCA000067
MLCC, 0402, X7R, 25V, 2.2nF				2,200pF (222)	MCCA000068
MLCC, 0402, X7R, 25V, 2.7nF				2,700pF (272)	MCCA000069
MLCC, 0402, X7R, 25V, 3.3nF				3,300pF (332)	MCCA000070
MLCC, 0402, X7R, 25V, 3.9nF				3,900pF (392)	MCCA000071
MLCC, 0402, X7R, 25V, 4.7nF				4,700pF (472)	MCCA000072
MLCC, 0402, X7R, 25V, 5.6nF				5,600pF (562)	MCCA000073
MLCC, 0402, X7R, 25V, 6.8nF				6,800pF (682)	MCCA000074
MLCC, 0402, X7R, 25V, 8.2nF				8,200pF (822)	MCCA000075
MLCC, 0402, X7R, 25V, 10nF				0.010μF (103)	MCCA000076
MLCC, 0402, Y5V, 25V, 10nF					MCCA000077
MLCC, 0402, Y5V, 25V, 15nF				0.015μF (153)	MCCA000078
MLCC, 0402, Y5V, 25V, 22nF					MCCA000079
MLCC, 0402, NP0, 50V, 0.5pF	NP0		50	0.5pF (0R5)	MCCA000080
MLCC, 0402, NP0, 50V, 1pF				1.0pF (1R0)	MCCA000081
MLCC, 0402, NP0, 50V, 1.5pF				1.5pF (1R5)	MCCA000082
MLCC, 0402, NP0, 50V, 2pF				2pF	MCCA000083
MLCC, 0402, NP0, 50V, 3pF				3pF	MCCA000084
MLCC, 0402, NP0, 50V, 4pF				4pF	MCCA000085
MLCC, 0402, NP0, 50V, 5pF				5pF	MCCA000086
MLCC, 0402, NP0, 50V, 6pF				6pF	MCCA000087
MLCC, 0402, NP0, 50V, 7pF				7pF	MCCA000088
MLCC, 0402, NP0, 50V, 8pF				8pF	MCCA000089
MLCC, 0402, NP0, 50V, 9pF				9pF	MCCA000090
MLCC, 0402, NP0, 50V, 10pF				10pF (100)	MCCA000091
MLCC, 0402, NP0, 50V, 11pF		11pF		MCCA000092	
MLCC, 0402, NP0, 50V, 12pF		12pF (120)		MCCA000093	
MLCC, 0402, NP0, 50V, 13pF		13pF		MCCA000094	
MLCC, 0402, NP0, 50V, 15pF		15pF (150)		MCCA000095	

Dimensions : Inches (Millimetres)

Specification Table

Description	Dielectric	Size [Inch (mm)]	Rated Voltage (V dc)	Capacitance (pF)	Part Number	
MLCC, 0402, NP0, 50V, 16pF	NP0	0402 (1005)	50	16pF	MCCA000096	
MLCC, 0402, NP0, 50V, 18pF				18pF (180)	MCCA000097	
MLCC, 0402, NP0, 50V, 20pF				20pF	MCCA000098	
MLCC, 0402, NP0, 50V, 22pF				22pF (220)	MCCA000099	
MLCC, 0402, NP0, 50V, 24pF				24pF	MCCA000100	
MLCC, 0402, NP0, 50V, 27pF				27pF (270)	MCCA000101	
MLCC, 0402, NP0, 50V, 30pF				30pF	MCCA000102	
MLCC, 0402, NP0, 50V, 33pF				33pF (330)	MCCA000103	
MLCC, 0402, NP0, 50V, 36pF				36pF	MCCA000104	
MLCC, 0402, NP0, 50V, 39pF				39pF (390)	MCCA000105	
MLCC, 0402, NP0, 50V, 43pF				43pF	MCCA000106	
MLCC, 0402, NP0, 50V, 47pF				47pF (470)	MCCA000107	
MLCC, 0402, NP0, 50V, 51pF				51pF	MCCA000108	
MLCC, 0402, NP0, 50V, 56pF				56pF (560)	MCCA000109	
MLCC, 0402, NP0, 50V, 62pF				62pF	MCCA000110	
MLCC, 0402, NP0, 50V, 68pF				68pF (680)	MCCA000111	
MLCC, 0402, NP0, 50V, 75pF				75pF	MCCA000112	
MLCC, 0402, NP0, 50V, 82pF				82pF (820)	MCCA000113	
MLCC, 0402, NP0, 50V, 91pF				91pF	MCCA000114	
MLCC, 0402, X7R, 50V, 100pF				X7R	100pF (101)	MCCA000115
MLCC, 0402, NP0, 50V, 100pF				NP0		MCCA000116
MLCC, 0402, NP0, 50V, 110pF	110pF	MCCA000117				
MLCC, 0402, X7R, 50V, 120pF	X7R	120pF (121)	MCCA000118			
MLCC, 0402, NP0, 50V, 120pF	NP0		MCCA000119			
MLCC, 0402, NP0, 50V, 130pF		130pF	MCCA000120			
MLCC, 0402, X7R, 50V, 150pF	X7R	150pF (151)	MCCA000121			
MLCC, 0402, NP0, 50V, 150pF	NP0		MCCA000122			
MLCC, 0402, NP0, 50V, 160pF		160pF	MCCA000123			
MLCC, 0402, X7R, 50V, 180pF	X7R	180pF (181)	MCCA000124			
MLCC, 0402, NP0, 50V, 180pF	NP0		MCCA000125			
MLCC, 0402, NP0, 50V, 200pF		-	MCCA000126			
MLCC, 0402, X7R, 50V, 220pF	X7R	220pF (221)	MCCA000127			
MLCC, 0402, NP0, 50V, 220pF	NP0		MCCA000128			

Dimensions : Inches (Millimetres)

Specification Table

Description	Dielectric	Size [Inch (mm)]	Rated Voltage (V dc)	Capacitance (pF, μF)	Part Number
MLCC, 0402, X7R, 50V, 270pF	X7R	0402 (1005)	50	270pF (271)	MCCA000129
MLCC, 0402, X7R, 50V, 330pF				330pF (331)	MCCA000130
MLCC, 0402, X7R, 50V, 390pF				390pF (391)	MCCA000131
MLCC, 0402, X7R, 50V, 470pF				470pF (471)	MCCA000132
MLCC, 0402, X7R, 50V, 560pF				560pF (561)	MCCA000133
MLCC, 0402, X7R, 50V, 680pF				680pF (681)	MCCA000134
MLCC, 0402, X7R, 50V, 820pF				820pF (821)	MCCA000135
MLCC, 0402, X7R, 50V, 1nF				1,000pF (102)	MCCA000136
MLCC, 0402, X7R, 50V, 1.2nF				1,200pF (122)	MCCA000137
MLCC, 0402, X7R, 50V, 1.5nF				1,500pF (152)	MCCA000138
MLCC, 0402, X7R, 50V, 1.8nF				1,800pF (182)	MCCA000139
MLCC, 0402, X7R, 50V, 2.2nF				2,200pF (222)	MCCA000140
MLCC, 0402, X7R, 50V, 2.7nF				2,700pF (272)	MCCA000141
MLCC, 0402, X7R, 50V, 3.3nF				3,300pF (332)	MCCA000142
MLCC, 0402, X7R, 50V, 3.9nF				3,900pF (392)	MCCA000143
MLCC, 0402, Y5V, 50V, 10nF	Y5V	0603 (1608)	10	0.010μF (103)	MCCA000144
MLCC, 0603, Y5V, 10V, 680nF				0.68μF (684)	MCCA000146
MLCC, 0603, X7R, 16V, 10nF	X7R		16	0.010μF (103)	MCCA000147
MLCC, 0603, X7R, 16V, 12nF				0.012μF (123)	MCCA000148
MLCC, 0603, X7R, 16V, 15nF				0.015μF (153)	MCCA000149
MLCC, 0603, X7R, 16V, 18nF				0.018μF (183)	MCCA000150
MLCC, 0603, X7R, 16V, 22nF				0.022μF (223)	MCCA000151
MLCC, 0603, X7R, 16V, 27nF				0.027μF (273)	MCCA000152
MLCC, 0603, X7R, 16V, 33nF				0.033μF (333)	MCCA000153
MLCC, 0603, X7R, 16V, 39nF				0.039μF (393)	MCCA000154
MLCC, 0603, X7R, 16V, 47nF				0.047μF (473)	MCCA000155
MLCC, 0603, X7R, 16V, 56nF				0.056μF (563)	MCCA000156
MLCC, 0603, X7R, 16V, 68nF				0.068μF (683)	MCCA000157
MLCC, 0603, X7R, 16V, 82nF				0.082μF (823)	MCCA000158
MLCC, 0603, X7R, 16V, 100nF				0.10μF (104)	MCCA000159
MLCC, 0603, Y5V, 16V, 100nF	Y5V			MCCA000160	
MLCC, 0603, Y5V, 16V, 150nF			0.15μF (154)	MCCA000161	
MLCC, 0603, Y5V, 16V, 220nF			0.22μF (224)	MCCA000162	

Dimensions : Inches (Millimetres)

Specification Table

Description	Dielectric	Size [Inch (mm)]	Rated Voltage (V dc)	Capacitance (pF, μF)	Part Number
MLCC, 0603, Y5V, 16V, 330nF	Y5V	0603 (1608)	16	0.33μF (334)	MCCA000163
MLCC, 0603, Y5V, 16V, 470nF				0.47μF (474)	MCCA000164
MLCC, 0603, X7R, 25V, 10nF	X7R		25	0.010μF (103)	MCCA000165
MLCC, 0603, X7R, 25V, 12nF				0.012μF (123)	MCCA000166
MLCC, 0603, X7R, 25V, 15nF				0.015μF (153)	MCCA000167
MLCC, 0603, X7R, 25V, 18nF				0.018μF (183)	MCCA000168
MLCC, 0603, X7R, 25V, 22nF				0.022μF (223)	MCCA000169
MLCC, 0603, X7R, 25V, 27nF				0.027μF (273)	MCCA000170
MLCC, 0603, X7R, 25V, 33nF				0.033μF (333)	MCCA000171
MLCC, 0603, X7R, 25V, 39nF				0.039μF (393)	MCCA000172
MLCC, 0603, X7R, 25V, 47nF				0.047μF (473)	MCCA000173
MLCC, 0603, X7R, 25V, 56nF				0.056μF (563)	MCCA000174
MLCC, 0603, X7R, 25V, 68nF				0.068μF (683)	MCCA000175
MLCC, 0603, Y5V, 25V, 68nF	Y5V			0.68μF (684)	MCCA000176
MLCC, 0603, X7R, 25V, 82nF	X7R			0.082μF (823)	MCCA000177
MLCC, 0603, X7R, 25V, 100nF				0.10μF (104)	MCCA000178
MLCC, 0603, Y5V, 25V, 100nF	Y5V				MCCA000179
MLCC, 0603, Y5V, 25V, 1μF				1.0μF (105)	MCCA000180
MLCC, 0603, NP0, 50V, 0.5pF	NP0		50	0.5pF (0R5)	MCCA000181
MLCC, 0603, NP0, 50V, 1pF				1.0pF (1R0)	MCCA000182
MLCC, 0603, NP0, 50V, 1.5pF				1.5pF (1R5)	MCCA000183
MLCC, 0603, NP0, 50V, 2pF				2pF	MCCA000184
MLCC, 0603, NP0, 50V, 3pF				3pF	MCCA000185
MLCC, 0603, NP0, 50V, 4pF				4pF	MCCA000186
MLCC, 0603, NP0, 50V, 5pF				5pF	MCCA000187
MLCC, 0603, NP0, 50V, 6pF				6pF	MCCA000188
MLCC, 0603, NP0, 50V, 7pF				7pF	MCCA000189
MLCC, 0603, NP0, 50V, 8pF				8pF	MCCA000190
MLCC, 0603, NP0, 50V, 9pF				9pF	MCCA000191
MLCC, 0603, NP0, 50V, 10pF				10pF (100)	MCCA000192
MLCC, 0603, NP0, 50V, 12pF				12pF (120)	MCCA000193
MLCC, 0603, NP0, 50V, 15pF				15pF (150)	MCCA000194
MLCC, 0603, NP0, 50V, 18pF				18pF (180)	MCCA000195
MLCC, 0603, NP0, 50V, 22pF				22pF (220)	MCCA000196

Dimensions : Inches (Millimetres)

Specification Table

Description	Dielectric	Size [Inch (mm)]	Rated Voltage (V dc)	Capacitance (pF)	Part Number
MLCC, 0603, NP0, 50V, 27pF	NP0	0603 (1608)	50	27pF (270)	MCCA000197
MLCC, 0603, NP0, 50V, 33pF				33pF (330)	MCCA000198
MLCC, 0603, NP0, 50V, 39pF				39pF (390)	MCCA000199
MLCC, 0603, NP0, 50V, 47pF				47pF (470)	MCCA000200
MLCC, 0603, NP0, 50V, 56pF				56pF (560)	MCCA000201
MLCC, 0603, NP0, 50V, 68pF				68pF (680)	MCCA000202
MLCC, 0603, NP0, 50V, 82pF				82pF (820)	MCCA000203
MLCC, 0603, NP0, 50V, 100pF				100pF (101)	MCCA000204
MLCC, 0603, NP0, 50V, 120pF				120pF (121)	MCCA000205
MLCC, 0603, NP0, 50V, 150pF				150pF (151)	MCCA000206
MLCC, 0603, NP0, 50V, 180pF				180pF (181)	MCCA000207
MLCC, 0603, X7R, 50V, 220pF				X7R	220pF (221)
MLCC, 0603, NP0, 50V, 220pF	NP0			220pF (221)	MCCA000209
MLCC, 0603, X7R, 50V, 270pF	X7R			270pF (271)	MCCA000210
MLCC, 0603, NP0, 50V, 270pF	NP0			270pF (271)	MCCA000211
MLCC, 0603, X7R, 50V, 330pF	X7R			330pF (331)	MCCA000212
MLCC, 0603, NP0, 50V, 330pF	NP0			330pF (331)	MCCA000213
MLCC, 0603, X7R, 50V, 390pF	X7R			390pF (391)	MCCA000214
MLCC, 0603, NP0, 50V, 390pF	NP0			390pF (391)	MCCA000215
MLCC, 0603, X7R, 50V, 470pF	X7R			470pF (471)	MCCA000216
MLCC, 0603, NP0, 50V, 470pF	NP0			470pF (471)	MCCA000217
MLCC, 0603, X7R, 50V, 560pF	X7R			560pF (561)	MCCA000218
MLCC, 0603, NP0, 50V, 560pF	NP0			560pF (561)	MCCA000219
MLCC, 0603, X7R, 50V, 680pF	X7R			680pF (681)	MCCA000220
MLCC, 0603, NP0, 50V, 680pF	NP0			680pF (681)	MCCA000221
MLCC, 0603, X7R, 50V, 820pF	X7R			820pF (821)	MCCA000222
MLCC, 0603, NP0, 50V, 820pF	NP0			820pF (821)	MCCA000223
MLCC, 0603, X7R, 50V, 1nF	X7R			1,000pF (102)	MCCA000224
MLCC, 0603, NP0, 50V, 1nF	NP0			1,000pF (102)	MCCA000225
MLCC, 0603, X7R, 50V, 1.2nF	X7R			1,200pF (122)	MCCA000226
MLCC, 0603, X7R, 50V, 1.5nF				1,500pF (152)	MCCA000227
MLCC, 0603, X7R, 50V, 1.8nF				1,800pF (182)	MCCA000228
MLCC, 0603, X7R, 50V, 2.2nF				2,200pF (222)	MCCA000229
MLCC, 0603, X7R, 50V, 2.7nF				2,700pF (272)	MCCA000230

Dimensions : Inches (Millimetres)

Specification Table

Description	Dielectric	Size [Inch (mm)]	Rated Voltage (V dc)	Capacitance (pF, μF)	Part Number
MLCC, 0603, X7R, 50V, 3.3nF	X7R	0603 (1608)	50	3,300pF (332)	MCCA000231
MLCC, 0603, X7R, 50V, 3.9nF				3,900pF (392)	MCCA000232
MLCC, 0603, X7R, 50V, 4.7nF				4,700pF (472)	MCCA000233
MLCC, 0603, X7R, 50V, 5.6nF				5,600pF (562)	MCCA000234
MLCC, 0603, X7R, 50V, 6.8nF				6,800pF (682)	MCCA000235
MLCC, 0603, X7R, 50V, 8.2nF				8,200pF (822)	MCCA000236
MLCC, 0603, X7R, 50V, 10nF				0.010μF (103)	MCCA000237
MLCC, 0603, Y5V, 50V, 10nF	Y5V				MCCA000238
MLCC, 0603, X7R, 50V, 12nF	X7R			0.012μF (123)	MCCA000239
MLCC, 0603, X7R, 50V, 15nF				0.015μF (153)	MCCA000240
MLCC, 0603, Y5V, 50V, 15nF	Y5V				MCCA000241
MLCC, 0603, X7R, 50V, 18nF	X7R			0.018μF (183)	MCCA000242
MLCC, 0603, X7R, 50V, 22nF				0.022μF (223)	MCCA000243
MLCC, 0603, Y5V, 50V, 22nF	Y5V				MCCA000244
MLCC, 0603, X7R, 50V, 27nF	X7R			0.027μF (273)	MCCA000245
MLCC, 0603, X7R, 50V, 33nF				0.033μF (333)	MCCA000246
MLCC, 0603, Y5V, 50V, 33nF	Y5V				MCCA000247
MLCC, 0603, X7R, 50V, 39nF	X7R			0.039μF (393)	MCCA000248
MLCC, 0603, X7R, 50V, 47nF				0.047μF (473)	MCCA000249
MLCC, 0603, Y5V, 50V, 47nF	Y5V				MCCA000250
MLCC, 0603, X7R, 50V, 56nF	X7R			0.056μF (563)	MCCA000251
MLCC, 0603, X7R, 50V, 68nF				0.068μF (683)	MCCA000252
MLCC, 0603, Y5V, 50V, 68nF	Y5V				MCCA000253
MLCC, 0603, X7R, 50V, 82nF	X7R			0.082μF (823)	MCCA000254
MLCC, 0603, X7R, 50V, 100nF				0.10μF (104)	MCCA000255
MLCC, 0603, Y5V, 50V, 100nF	Y5V				MCCA000256
MLCC, 0603, NP0, 100V, 15pF	NP0		100	15pF (150)	MCCA000257
MLCC, 0603, NP0, 100V, 22pF				22pF (220)	MCCA000258
MLCC, 0603, NP0, 100V, 33pF				33pF (330)	MCCA000259
MLCC, 0603, NP0, 100V, 47pF				47pF (470)	MCCA000260
MLCC, 0603, NP0, 100V, 68pF				68pF (680)	MCCA000261
MLCC, 0603, NP0, 100V, 100pF				100pF (101)	MCCA000262
MLCC, 0603, X7R, 100V, 220pF	X7R			220pF (221)	MCCA000263
MLCC, 0603, X7R, 100V, 330pF				330pF (331)	MCCA000264

Dimensions : Inches (Millimetres)

Specification Table

Description	Dielectric	Size [Inch (mm)]	Rated Voltage (V dc)	Capacitance (pF, µF)	Part Number
MLCC, 0603, X7R, 100V, 470pF	X7R	0603 (1608)	100	470pF (471)	MCCA000265
MLCC, 0603, X7R, 100V, 680pF				680pF (681)	MCCA000266
MLCC, 0603, X7R, 100V, 100pF				100pF (101)	MCCA000267
MLCC, 0805, Y5V, 6.3V, 10µF	Y5V	0805 (2012)	6.3	10uF	MCCA000268
MLCC, 0805, X7R, 16V, 47nF	X7R		16	0.047µF (473)	MCCA000270
MLCC, 0805, X7R, 16V, 56nF				0.056µF (563)	MCCA000271
MLCC, 0805, X7R, 16V, 68nF				0.068µF (683)	MCCA000272
MLCC, 0805, X7R, 16V, 82nF				0.082µF (823)	MCCA000273
MLCC, 0805, X7R, 16V, 100nF				0.10µF (104)	MCCA000274
MLCC, 0805, Y5V, 16V, 100nF	Y5V			MCCA000275	
MLCC, 0805, X7R, 16V, 120nF	X7R			0.12µF (124)	MCCA000276
MLCC, 0805, X7R, 16V, 150nF				0.15µF (154)	MCCA000277
MLCC, 0805, Y5V, 16V, 150nF	Y5V			MCCA000278	
MLCC, 0805, X7R, 16V, 180nF	X7R			0.18µF (184)	MCCA000279
MLCC, 0805, X7R, 16V, 220nF				0.22µF (224)	MCCA000280
MLCC, 0805, Y5V, 16V, 220nF	Y5V			MCCA000281	
MLCC, 0805, X7R, 16V, 270nF	X7R			0.27µF (274)	MCCA000282
MLCC, 0805, X7R, 16V, 330nF				0.33µF (334)	MCCA000283
MLCC, 0805, Y5V, 16V, 330nF	Y5V			MCCA000284	
MLCC, 0805, X7R, 16V, 390nF	X7R			0.39µF (394)	MCCA000285
MLCC, 0805, X7R, 16V, 470nF				0.47µF (474)	MCCA000286
MLCC, 0805, Y5V, 16V, 470nF	Y5V				MCCA000287
MLCC, 0805, Y5V, 16V, 680nF				0.68µF (684)	MCCA000288
MLCC, 0805, X7R, 25V, 39nF	X7R		25	0.039µF (393)	MCCA000289
MLCC, 0805, X7R, 25V, 47nF				0.047µF (473)	MCCA000290
MLCC, 0805, X7R, 25V, 56nF				0.056µF (563)	MCCA000291
MLCC, 0805, X7R, 25V, 68nF				0.068µF (683)	MCCA000292
MLCC, 0805, Y5V, 25V, 68nF	Y5V			MCCA000293	
MLCC, 0805, X7R, 25V, 82nF	X7R			0.082µF (823)	MCCA000294
MLCC, 0805, X7R, 25V, 100nF				0.10µF (104)	MCCA000295
MLCC, 0805, Y5V, 25V, 100nF	Y5V			MCCA000296	
MLCC, 0805, X7R, 25V, 120nF	X7R			0.12µF (124)	MCCA000297
MLCC, 0805, X7R, 25V, 150nF				0.15µF (154)	MCCA000298

Dimensions : Inches (Millimetres)

Specification Table

Description	Dielectric	Size [Inch (mm)]	Rated Voltage (V dc)	Capacitance (pF, μF)	Part Number
MLCC, 0805, Y5V, 25V, 150nF	Y5V	0805 (2012)	25	0.15μF (154)	MCCA000299
MLCC, 0805, X7R, 25V, 180nF	X7R			0.18μF (184)	MCCA000300
MLCC, 0805, X7R, 25V, 220nF				0.22μF (224)	MCCA000301
MLCC, 0805, Y5V, 25V, 220nF	Y5V			0.22μF (224)	MCCA000302
MLCC, 0805, Y5V, 25V, 330nF				0.33μF (334)	MCCA000303
MLCC, 0805, Y5V, 25V, 470nF				0.47μF (474)	MCCA000304
MLCC, 0805, Y5V, 25V, 2.2μF				2.2uF	MCCA000306
MLCC, 0805, NP0, 50V, 0.5pF	NP0		50	0.5pF (0R5)	MCCA000307
MLCC, 0805, NP0, 50V, 1pF				1.0pF (1R0)	MCCA000308
MLCC, 0805, NP0, 50V, 1.5pF				1.5pF (1R5)	MCCA000309
MLCC, 0805, NP0, 50V, 2pF				2pF	MCCA000310
MLCC, 0805, NP0, 50V, 3pF				3pF	MCCA000311
MLCC, 0805, NP0, 50V, 4pF				4pF	MCCA000312
MLCC, 0805, NP0, 50V, 5pF				5pF	MCCA000313
MLCC, 0805, NP0, 50V, 6pF				6pF	MCCA000314
MLCC, 0805, NP0, 50V, 7pF				7pF	MCCA000315
MLCC, 0805, NP0, 50V, 8pF				8pF	MCCA000316
MLCC, 0805, NP0, 50V, 9pF				9pF	MCCA000317
MLCC, 0805, NP0, 50V, 10pF				10pF (100)	MCCA000318
MLCC, 0805, NP0, 50V, 12pF				12pF (120)	MCCA000319
MLCC, 0805, NP0, 50V, 15pF				15pF (150)	MCCA000320
MLCC, 0805, NP0, 50V, 18pF				18pF (180)	MCCA000321
MLCC, 0805, NP0, 50V, 22pF				22pF (220)	MCCA000322
MLCC, 0805, NP0, 50V, 27pF				27pF (270)	MCCA000323
MLCC, 0805, NP0, 50V, 33pF				33pF (330)	MCCA000324
MLCC, 0805, NP0, 50V, 39pF				39pF (390)	MCCA000325
MLCC, 0805, NP0, 50V, 47pF				47pF (470)	MCCA000326
MLCC, 0805, NP0, 50V, 56pF				56pF (560)	MCCA000327
MLCC, 0805, NP0, 50V, 68pF				68pF (680)	MCCA000328
MLCC, 0805, NP0, 50V, 82pF				82pF (820)	MCCA000329
MLCC, 0805, NP0, 50V, 100pF				100pF (101)	MCCA000330
MLCC, 0805, NP0, 50V, 120pF				120pF (121)	MCCA000331
MLCC, 0805, NP0, 50V, 150pF				150pF (151)	MCCA000332
MLCC, 0805, NP0, 50V, 180pF				180pF (181)	MCCA000333

Dimensions : Inches (Millimetres)

Specification Table

Description	Dielectric	Size [Inch (mm)]	Rated Voltage (V dc)	Capacitance (pF, μF)	Part Number
MLCC, 0805, X7R, 50V, 220pF	X7R	0805 (2012)	50	220pF (221)	MCCA000334
MLCC, 0805, NP0, 50V, 220pF	NP0				MCCA000335
MLCC, 0805, X7R, 50V, 270pF	X7R			270pF (271)	MCCA000336
MLCC, 0805, NP0, 50V, 270pF	NP0				MCCA000337
MLCC, 0805, X7R, 50V, 330pF	X7R			330pF (331)	MCCA000338
MLCC, 0805, NP0, 50V, 330pF	NP0				MCCA000339
MLCC, 0805, X7R, 50V, 390pF	X7R			390pF (391)	MCCA000340
MLCC, 0805, NP0, 50V, 390pF	NP0				MCCA000341
MLCC, 0805, X7R, 50V, 470pF	X7R			470pF (471)	MCCA000342
MLCC, 0805, NP0, 50V, 470pF	NP0				MCCA000343
MLCC, 0805, X7R, 50V, 560pF	X7R			560pF (561)	MCCA000344
MLCC, 0805, NP0, 50V, 560pF	NP0				MCCA000345
MLCC, 0805, X7R, 50V, 680pF	X7R			680pF (681)	MCCA000346
MLCC, 0805, NP0, 50V, 680pF	NP0				MCCA000347
MLCC, 0805, X7R, 50V, 820pF	X7R			820pF (821)	MCCA000348
MLCC, 0805, NP0, 50V, 820pF	NP0				MCCA000349
MLCC, 0805, X7R, 50V, 1nF	X7R			1,000pF (102)	MCCA000350
MLCC, 0805, NP0, 50V, 1nF	NP0				MCCA000351
MLCC, 0805, X7R, 50V, 1.2nF	X7R			1,200pF (122)	MCCA000352
MLCC, 0805, NP0, 50V, 1.2nF	NP0				MCCA000353
MLCC, 0805, NP0, 50V, 1.5nF				1,500pF (152)	MCCA000354
MLCC, 0805, X7R, 50V, 1.5nF	MCCA000355				
MLCC, 0805, X7R, 50V, 1.8nF	X7R			1,800pF (182)	MCCA000356
MLCC, 0805, NP0, 50V, 1.8nF					MCCA000357
MLCC, 0805, X7R, 50V, 2.2nF	X7R			2,200pF (222)	MCCA000358
MLCC, 0805, NP0, 50V, 2.2nF	NP0				MCCA000359
MLCC, 0805, X7R, 50V, 2.7nF	X7R			2,700pF (272)	MCCA000360
MLCC, 0805, NP0, 50V, 2.7nF	NP0				MCCA000361
MLCC, 0805, X7R, 50V, 3.3nF	X7R			3,300pF (332)	MCCA000362
MLCC, 0805, X7R, 50V, 3.9nF				3,900pF (392)	MCCA000363
MLCC, 0805, X7R, 50V, 4.7nF				4,700pF (472)	MCCA000364
MLCC, 0805, X7R, 50V, 5.6nF				5,600pF (562)	MCCA000365
MLCC, 0805, X7R, 50V, 6.8nF				6,800pF (682)	MCCA000366
MLCC, 0805, X7R, 50V, 8.2nF				8,200pF (822)	MCCA000367

Dimensions : Inches (Millimetres)

Specification Table

Description	Dielectric	Size [Inch (mm)]	Rated Voltage (V dc)	Capacitance (pF, μF)	Part Number
MLCC, 0805, X7R, 50V, 10nF	X7R	0805 (2012)	50	0.010μF (103)	MCCA000368
MLCC, 0805, Y5V, 50V, 10nF	Y5V				MCCA000369
MLCC, 0805, X7R, 50V, 12nF	X7R			0.012μF (123)	MCCA000370
MLCC, 0805, X7R, 50V, 15nF				0.015μF (153)	MCCA000371
MLCC, 0805, Y5V, 50V, 15nF	Y5V				MCCA000372
MLCC, 0805, X7R, 50V, 18nF	X7R			0.018μF (183)	MCCA000373
MLCC, 0805, X7R, 50V, 22nF				0.022μF (223)	MCCA000374
MLCC, 0805, Y5V, 50V, 22nF	Y5V				MCCA000375
MLCC, 0805, X7R, 50V, 27nF	X7R			0.027μF (273)	MCCA000376
MLCC, 0805, Y5V, 50V, 33nF	Y5V			0.033μF (333)	MCCA000377
MLCC, 0805, X7R, 50V, 33nF	X7R				MCCA000378
MLCC, 0805, X7R, 50V, 39nF				0.039μF (393)	MCCA000379
MLCC, 0805, Y5V, 50V, 47nF	Y5V			0.047μF (473)	MCCA000380
MLCC, 0805, X7R, 50V, 47nF	X7R				MCCA000381
MLCC, 0805, X7R, 50V, 56nF				0.056μF (563)	MCCA000382
MLCC, 0805, X7R, 50V, 68nF				0.068μF (683)	MCCA000383
MLCC, 0805, Y5V, 50V, 68nF	MCCA000384				
MLCC, 0805, X7R, 50V, 82nF	X7R			0.082μF (823)	MCCA000385
MLCC, 0805, X7R, 50V, 100nF				0.10μF (104)	MCCA000386
MLCC, 0805, Y5V, 50V, 100nF	Y5V				MCCA000387
MLCC, 0805, Y5V, 50V, 150nF	Y5V			0.15μF (154)	MCCA000388
MLCC, 0805, Y5V, 50V, 220nF				0.22μF (224)	MCCA000389
MLCC, 0805, NP0, 100V, 15pF	NP0		100	15pF (150)	MCCA000391
MLCC, 0805, NP0, 100V, 22pF				22pF (220)	MCCA000392
MLCC, 0805, NP0, 100V, 33pF				33pF (330)	MCCA000393
MLCC, 0805, NP0, 100V, 47pF				47pF (470)	MCCA000394
MLCC, 0805, NP0, 100V, 68pF				68pF (680)	MCCA000395
MLCC, 0805, NP0, 100V, 100pF				100pF (101)	MCCA000396
MLCC, 0805, NP0, 100V, 150pF				150pF (151)	MCCA000397
MLCC, 0805, X7R, 100V, 220pF	X7R		220pF (221)	MCCA000398	
MLCC, 0805, NP0, 100V, 220pF	NP0			MCCA000399	
MLCC, 0805, X7R, 100V, 330pF	X7R		330pF (331)	MCCA000400	
MLCC, 0805, NP0, 100V, 330pF	NP0			MCCA000401	

Dimensions : Inches (Millimetres)

Specification Table

Description	Dielectric	Size [Inch (mm)]	Rated Voltage (V dc)	Capacitance (pF, µF)	Part Number
MLCC, 0805, X7R, 100V, 470pF	X7R	0805 (2012)	100	470pF (471)	MCCA000402
MLCC, 0805, NP0, 100V, 470pF	NP0				MCCA000403
MLCC, 0805, X7R, 100V, 680pF	X7R			680pF (681)	MCCA000404
MLCC, 0805, NP0, 100V, 680pF	NP0				MCCA000405
MLCC, 0805, X7R, 100V, 1nF	X7R			1,000pF (102)	MCCA000406
MLCC, 0805, NP0, 100V, 1nF	NP0				MCCA000407
MLCC, 0805, X7R, 100V, 1.5nF	X7R			1,500pF (152)	MCCA000408
MLCC, 0805, X7R, 100V, 2.2nF				2,200pF (222)	MCCA000409
MLCC, 0805, X7R, 100V, 3.3nF				3,300pF (332)	MCCA000410
MLCC, 0805, X7R, 100V, 4.7nF				4,700pF (472)	MCCA000411
MLCC, 0805, X7R, 100V, 6.8nF				6,800pF (682)	MCCA000412
MLCC, 0805, X7R, 100V, 10nF				0.010µF (103)	MCCA000413
MLCC, 0805, X7R, 100V, 15nF				0.015µF (153)	MCCA000414
MLCC, 1206, X7R, 16V, 100nF		1206 (3216)	16	0.10µF (104)	MCCA000416
MLCC, 1206, X7R, 16V, 120nF				0.12µF (124)	MCCA000417
MLCC, 1206, X7R, 16V, 150nF				0.15µF (154)	MCCA000418
MLCC, 1206, X7R, 16V, 180nF				0.18µF (184)	MCCA000419
MLCC, 1206, X7R, 16V, 220nF				0.22µF (224)	MCCA000420
MLCC, 1206, X7R, 16V, 270nF				0.27µF (274)	MCCA000421
MLCC, 1206, X7R, 16V, 330nF	0.33µF (334)			MCCA000422	
MLCC, 1206, X7R, 16V, 390nF	0.39µF (394)			MCCA000423	
MLCC, 1206, X7R, 16V, 470nF	0.47µF (474)			MCCA000424	
MLCC, 1206, X7R, 16V, 560nF	0.56µF (564)			MCCA000425	
MLCC, 1206, X7R, 16V, 680nF	0.68µF (684)			MCCA000426	
MLCC, 1206, Y5V, 16V, 680nF	Y5V				MCCA000427
MLCC, 1206, X7R, 16V, 820nF	X7R			25	0.82µF (824)
MLCC, 1206, X7R, 25V, 100nF		0.1µF (104)	MCCA000434		
MLCC, 1206, X7R, 25V, 120nF		0.12µF (124)	MCCA000435		
MLCC, 1206, X7R, 25V, 150nF		0.15µF (154)	MCCA000436		
MLCC, 1206, X7R, 25V, 180nF		0.18µF (184)	MCCA000437		
MLCC, 1206, X7R, 25V, 220nF		0.22µF (224)	MCCA000438		
MLCC, 1206, X7R, 25V, 270nF		0.27µF (274)	MCCA000439		
MLCC, 1206, X7R, 25V, 330nF		0.33µF (334)	MCCA000440		
MLCC, 1206, X7R, 25V, 390nF		0.39µF (394)	MCCA000441		

Dimensions : Inches (Millimetres)

Specification Table

Description	Dielectric	Size [Inch (mm)]	Rated Voltage (V dc)	Capacitance (pF, μF)	Part Number
MLCC, 1206, X7R, 25V, 470nF	X7R	1206 (3216)	25	0.47μF (474)	MCCA000442
MLCC, 1206, Y5V, 25V, 470nF	Y5V			0.47μF (474)	MCCA000443
MLCC, 1206, X7R, 25V, 560nF	X7R			0.56μF (564)	MCCA000444
MLCC, 1206, X7R, 25V, 680nF				0.68μF (684)	MCCA000445
MLCC, 1206, Y5V, 25V, 680nF	Y5V			0.68μF (684)	MCCA000446
MLCC, 1206, X7R, 25V, 820nF	X7R			0.82μF (824)	MCCA000447
MLCC, 1206, NP0, 50V, 100pF	NP0		50	100pF (101)	MCCA000448
MLCC, 1206, X7R, 50V, 220pF	X7R			220pF (221)	MCCA000449
MLCC, 1206, X7R, 50V, 270pF				270pF (271)	MCCA000450
MLCC, 1206, X7R, 50V, 330pF				330pF (331)	MCCA000451
MLCC, 1206, X7R, 50V, 390pF				390pF (391)	MCCA000452
MLCC, 1206, X7R, 50V, 470pF				470pF (471)	MCCA000453
MLCC, 1206, X7R, 50V, 560pF				560pF (561)	MCCA000454
MLCC, 1206, X7R, 50V, 680pF				680pF (681)	MCCA000455
MLCC, 1206, X7R, 50V, 820pF				820pF (821)	MCCA000456
MLCC, 1206, X7R, 50V, 1nF				1,000pF (102)	MCCA000457
MLCC, 1206, X7R, 50V, 1.2nF				1,200pF (122)	MCCA000458
MLCC, 1206, X7R, 50V, 1.5nF				1,500pF (152)	MCCA000459
MLCC, 1206, X7R, 50V, 1.8nF				1,800pF (182)	MCCA000460
MLCC, 1206, X7R, 50V, 2.2nF				2,200pF (222)	MCCA000461
MLCC, 1206, X7R, 50V, 2.7nF				2,700pF (272)	MCCA000462
MLCC, 1206, X7R, 50V, 3.3nF				3,300pF (332)	MCCA000463
MLCC, 1206, X7R, 50V, 3.9nF				3,900pF (392)	MCCA000464
MLCC, 1206, X7R, 50V, 4.7nF				4,700pF (472)	MCCA000465
MLCC, 1206, X7R, 50V, 5.6nF				5,600pF (562)	MCCA000466
MLCC, 1206, X7R, 50V, 6.8nF				6,800pF (682)	MCCA000467
MLCC, 1206, X7R, 50V, 8.2nF				8,200pF (822)	MCCA000468
MLCC, 1206, X7R, 50V, 10nF				0.010μF (103)	MCCA000469
MLCC, 1206, X7R, 50V, 12nF				0.012μF (123)	MCCA000470
MLCC, 1206, X7R, 50V, 15nF				0.015μF (153)	MCCA000471
MLCC, 1206, X7R, 50V, 18nF				0.018μF (183)	MCCA000472
MLCC, 1206, X7R, 50V, 22nF				0.022μF (223)	MCCA000473
MLCC, 1206, X7R, 50V, 27nF				0.027μF (273)	MCCA000474
MLCC, 1206, X7R, 50V, 33nF				0.033μF (333)	MCCA000475

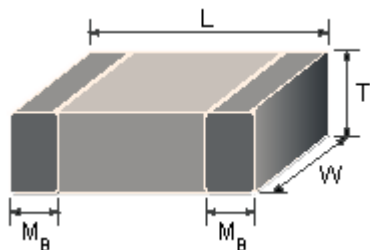
Dimensions : Inches (Millimetres)

Specification Table

Description	Dielectric	Size [Inch (mm)]	Rated Voltage (V dc)	Capacitance (μF)	Part Number
MLCC, 1206, X7R, 50V, 39nF	X7R	1206 (3216)	50	0.039μF (393)	MCCA000476
MLCC, 1206, X7R, 50V, 47nF				0.047μF (473)	MCCA000477
MLCC, 1206, X7R, 50V, 100nF				0.10μF (104)	MCCA000478
MLCC, 1206, X7R, 50V, 220nF				0.22μF (224)	MCCA000479
MLCC, 1206, X7R, 100V, 22nF			100	0.022μF (223)	MCCA000487
MLCC, 1206, X7R, 100V, 33nF				0.033μF (333)	MCCA000488
MLCC, 1206, X7R, 100V, 47nF				0.047μF (473)	MCCA000489
MLCC, 1206, X7R, 100V, 100nF				0.10μF (104)	MCCA000490
MLCC, 1210, Y5V, 6.3V, 47μF	Y5V	1210 (3225)	6.3	47μF	MCCA000491
MLCC, 1210, Y5V, 50V, 10μF			50	10μF	MCCA000492
MLCC, 1210, X7R, 100V, 220nF	X7R		100	0.22μF (224)	MCCA000493
MLCC, 1210, X7R, 100V, 470nF				0.47μF (474)	MCCA000494
MLCC, 1210, X7R, 100V, 680nF				0.68μF (684)	MCCA000495

Dimensions : Inches (Millimetres)

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Capacitance Range

Dielectric	X5R												
	0402			0603				0805				1210	
Size	6.3 (V)	10 (V)	16 (V)	6.3 (V)	10 (V)	16 (V)	25 (V)	6.3 (V)	10 (V)	16 (V)	25 (V)	10 (V)	16 (V)
0.027μF (273)	-	-	N	-	-	-	-	-	-	-	-	-	-
0.033μF (333)	-	-	N	-	-	-	-	-	-	-	-	-	-
0.039μF (393)	-	-	N	-	-	-	-	-	-	-	-	-	-
0.047μF (473)	-	-	N	-	-	-	-	-	-	-	-	-	-
0.056μF (563)	-	N	N	-	-	-	-	-	-	-	-	-	-
0.068μF (683)	-	N	N	-	-	-	-	-	-	-	-	-	-
0.082μF (823)	N	N	N	-	-	-	-	-	-	-	-	-	-
0.10μF (104)	N	N	N	-	-	-	-	-	-	-	-	-	-
0.22μF (224)	N	-	-	-	-	X	X	-	-	-	-	-	-
0.33μF (334)	N	-	-	-	X	X	X	-	-	-	-	-	-
0.47μF (474)	N	-	-	-	X	X	X	-	-	-	-	-	-
0.68μF (684)	N	-	-	X	X	X	X	-	-	-	-	-	-
1.0μF (105)	N	-	-	X	X	X	X	-	-	-	-	-	-
1.5μF (155)	-	-	-	X	-	-	-	I	I	-	-	K	K
2.2μF (225)	-	-	-	X	-	-	-	I	I	I	I	K	K
3.3μF (335)	-	-	-	-	-	-	-	I	I	I	I	-	-
4.7μF (475)	-	-	-	-	-	-	-	I	I	I	I	K	K
6.8μF (685)	-	-	-	-	-	-	-	-	-	-	-	-	-
10μF (106)	-	-	-	-	-	-	-	I	-	-	-	K	K
22μF (226)	-	-	-	-	-	-	-	-	-	-	-	-	-

1. The letter in cell is expressed the symbol of product thickness.

Capacitance Range

Dielectric	Y5V													
Size	0603		0805				1206				1210			
Rated Voltage (V dc)	10 (V)	16 (V)	10 (V)	16 (V)	25 (V)	50 (V)	10 (V)	16 (V)	25 (V)	50 (V)	10 (V)	16 (V)	25 (V)	50 (V)
1.0μF (105)	S	X	B	B	D	D	C	C	C	C	C	C	C	C
1.5μF (155)	S	-	D	D	-	-	C	C	C	-	C	C	C	-
2.2μF (225)	S	-	D	D	I	-	C	C	C	-	C	C	C	G
3.3μF (335)	-	-	D	D	-	-	J	J	J	-	C	C	C	-
4.7μF (475)	-	-	D	D	I	-	J	J	J	-	C	C	D	G
6.8μF (685)	-	-	I	-	-	-	J	J	-	-	C	C	D	-
10μF (106)	-	-	I	-	-	-	J	J	P	-	D	D	G	-
22μF (226)	-	-	-	-	-	-	P	-	-	-	K	K	-	-
47μF (476)	-	-	-	-	-	-	-	-	-	-	K	-	-	-
100μF (107)	-	-	-	-	-	-	-	-	-	-	-	-	-	-

1. The letter in cell is expressed the symbol of product thickness.

Capacitance Range

Dielectric	X7R				
Size	1206			1812	
Rated Voltage (V dc)	10 (V)	16 (V)	25 (V)	50 (V)	100 (V)
1.0μF (105)	J	J	J	-	K
1.5μF (155)	J	J	-	-	K
2.2μF (225)	J	J	J	-	M
3.3μF (335)	P	P	P	-	-
4.7μF (475)	P	P	P	-	-

1. The letter in cell is expressed the symbol of product thickness.

Dimensions Table

Size Inch (mm)	Thickness (mm)/Symbol	
0402 (1005)	0.50 ±0.05	N
0603 (1608)	0.80 ±0.07	S
	0.80 + 0.15/-0.10	X
0805 (2012)	0.80 ±0.10	B
	1.25 ±0.10	D
	1.25 ±0.20	I
1206 (3216)	0.95 ±0.10	C
	1.15 ±0.15	J
	1.60 ±0.20	G
	1.60 +0.30/-0.10	P
1210 (3225)	0.95 ±0.10	C
	1.25 ±0.10	D
	1.60 ±0.20	G
	2.00 ±0.20	K
	2.50 ±0.30	M
1812 (4532)	1.25 ±0.10	D
	2.00 ±0.20	K
	2.50 ±0.30	M

Dimensions

Size Inch (mm)	L (mm)	W (mm)	M _B (mm)
0402 (1005)	1.00 ±0.05	0.50 ±0.05	0.25 +0.05/-0.10
0603 (1608)	1.60 ±0.10	0.80 ±0.10	0.40 ±0.15
	1.60 +0.15/-0.10	0.80 +0.15/-0.10	
0805 (2012)	2.00 ±0.15	1.25 ±0.10	0.50 ±0.20
	2.00 ±0.20	1.25 ±0.20	
1206 (3216)	3.20 ±0.15	1.60 ±0.15	0.60 ±0.20
	3.20 ±0.20	1.60 ±0.15	
		1.60 ±0.20	
		1.60 +0.30/-0.10	
1210 (3225)	3.20 ±0.30	2.50 ±0.20	0.75 ±0.25
	3.20 ±0.40	2.50 ±0.30	
1812 (4532)	4.50 ±0.40	3.20 ±0.30	0.75 ±0.25

Dimensions : Inches (Millimetres)

Specification Table

Description	Dielectric	Size	Rated Voltage (V dc)	Capacitance (μF)	Part Number
MLCC,0402, X5R, 6.3V, 0.22μF	X5R	0402 (1005)	6.3	0.22 (224)	MCCA000498
MLCC,0402, X5R, 6.3V, 0.47μF				0.47 (474)	MCCA000499
MLCC,0402, X5R, 6.3V, 1μF				1 (105)	MCCA000500
MLCC,0402, X5R, 6.3V, 2.2μF				2.2 (225)	MCCA000501
MLCC,0402, X5R, 10V, 0.056μF			10	0.056 (563)	MCCA000502
MLCC,0402, X5R, 10V, 0.068μF				0.068 (683)	MCCA000503
MLCC,0402, X5R, 10V, 0.082μF				0.082 (823)	MCCA000504
MLCC,0402, X5R, 10V, 0.1μF				0.1 (104)	MCCA000505
MLCC,0402, X5R, 10V, 1μF				1 (105)	MCCA000506
MLCC,0402, X5R, 16V, 0.027μF			16	0.027 (273)	MCCA000507
MLCC,0402, X5R, 16V, 0.033μF				0.033 (333)	MCCA000508
MLCC,0402, X5R, 16V, 0.039μF				0.039 (393)	MCCA000509
MLCC,0402, X5R, 16V, 0.047μF				0.047 (473)	MCCA000510
MLCC,0402, X5R, 16V, 0.068μF				0.068 (683)	MCCA000511
MLCC,0402, X5R, 16V, 0.1μF				0.1 (104)	MCCA000512
MLCC,0402, X5R, 16V, 0.22μF				0.22 (224)	MCCA000513
MLCC,0603, X5R, 6.3V, 0.82μF		0603 (1608)	6.3	0.82	MCCA000514
MLCC,0603, X5R, 6.3V, 1μF				1 (105)	MCCA000515
MLCC,0603, X5R, 6.3V, 2.2μF				2.2 (225)	MCCA000516
MLCC,0603, X5R, 6.3V, 10μF				10 (106)	MCCA000517
MLCC,0603, X5R, 10V, 0.33μF			10	0.33 (334)	MCCA000518
MLCC,0603, X5R, 10V, 0.47μF				0.47 (474)	MCCA000519
MLCC,0603, X5R, 10V, 0.68μF				0.68 (684)	MCCA000520

Dimensions : Inches (Millimetres)

Specification Table

Description	Dielectric	Size	Rated Voltage (V dc)	Capacitance (μF)	Part Number
MLCC,0603, Y5V, 10V, 1μF	Y5V	0603 (1608)	10	1 (105)	MCCA000521
MLCC,0603, X5R, 10V, 1μF	X5R			1 (105)	MCCA000522
MLCC,0603, Y5V, 10V, 2.2μF				2.2 (225)	MCCA000523
MLCC,0603, X5R, 10V, 2.2μF				2.2 (225)	MCCA000524
MLCC,0603, X5R, 16V, 0.22μF			0.22 (224)	MCCA000525	
MLCC,0603, X5R, 16V, 0.33μF			0.33 (334)	MCCA000526	
MLCC,0603, X5R, 16V, 0.47μF			0.47 (474)	MCCA000527	
MLCC,0603, X5R, 16V, 0.68μF			0.68 (684)	MCCA000528	
MLCC,0603, X5R, 16V, 1μF	1 (105)		MCCA000529		
MLCC,0603, Y5V, 16V, 1μF	Y5V		1 (105)	MCCA000530	
MLCC,0603, X5R, 25V, 1μF			25	1 (105)	MCCA000531
MLCC,0805, X5R, 6.3V, 1.5μF		6.3	1.5 (155)	MCCA000532	
MLCC,0805, X5R, 6.3V, 2.2μF			2.2 (225)	MCCA000533	
MLCC,0805, X5R, 6.3V, 3.3μF			3.3 (335)	MCCA000534	
MLCC,0805, X5R, 6.3V, 4.7μF			4.7 (475)	MCCA000535	
MLCC,0805, X5R, 6.3V, 22μF			22 (226)	MCCA000536	
MLCC,0805, X5R, 10V, 2.2μF		10	2.2 (225)	MCCA000537	
MLCC,0805, Y5V, 10V, 3.3μF			3.3 (335)	MCCA000538	
MLCC,0805, X5R, 10V, 3.3μF			3.3 (335)	MCCA000539	
MLCC,0805, Y5V, 10V, 4.7μF			4.7 (475)	MCCA000540	
MLCC,0805, X5R, 10V, 4.7μF			4.7 (475)	MCCA000541	
MLCC,0805, Y5V, 10V, 10μF			10 (106)	MCCA000542	
MLCC,0805, Y5V, 16V, 1μF	Y5V	16	1 (105)	MCCA000543	
MLCC,0805, Y5V, 16V, 1.5μF			1.5 (155)	MCCA000544	
MLCC,0805, Y5V, 16V, 2.2μF			2.2 (225)	MCCA000545	

Dimensions : Inches (Millimetres)

Specification Table

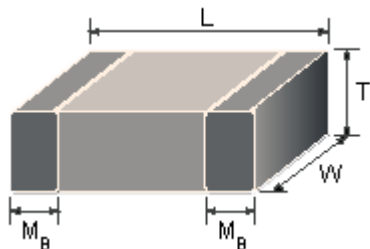
Description	Dielectric	Size	Rated Voltage (V dc)	Capacitance (μF)	Part Number
MLCC,0805, X5R, 16V, 2.2μF	X5R	0805 (2012)	16	2.2 (225)	MCCA000546
MLCC,0805, Y5V, 16V, 4.7μF	Y5V			4.7 (475)	MCCA000547
MLCC,0805, X5R, 16V, 4.7μF	X5R				MCCA000548
MLCC,0805, Y5V, 25V, 1μF	Y5V		25	1 (105)	MCCA000549
MLCC,0805, X5R, 25V, 2.2μF	X5R			2.2 (225)	MCCA000550
MLCC,0805, X5R, 25V, 4.7μF				4.7 (475)	MCCA000551
MLCC,0805, Y5V, 50V, 1μF	Y5V		50	1 (105)	MCCA000552
MLCC,1206, X7R, 10V, 1.5μF	X7R	1206 (3216)	10	1.5 (155)	MCCA000553
MLCC,1206, Y5V, 10V, 10μF	Y5V			10 (106)	MCCA000554
MLCC,1206, Y5V, 10V, 22μF				22 (226)	MCCA000555
MLCC,1206, X7R, 16V, 1μF	X7R		16	1 (105)	MCCA000556
MLCC,1206, Y5V, 16V, 1μF	Y5V				MCCA000557
MLCC,1206, X7R, 16V, 1.5μF	X7R			1.5 (155)	MCCA000558
MLCC,1206, Y5V, 16V, 1.5μF	Y5V				MCCA000559
MLCC,1206, X7R, 16V, 2.2μF	X7R			2.2 (225)	MCCA000560
MLCC,1206, Y5V, 16V, 2.2μF	Y5V				MCCA000561
MLCC,1206, Y5V, 16V, 3.3μF				3.3 (335)	MCCA000562
MLCC,1206, Y5V, 16V, 4.7μF				4.7 (475)	MCCA000563
MLCC,1206, Y5V, 16V, 10μF				10 (106)	MCCA000564
MLCC,1206, X7R, 25V, 1μF	X7R		25	1 (105)	MCCA000565
MLCC,1206, Y5V, 25V, 1μF	Y5V				MCCA000566
MLCC,1206, Y5V, 25V, 1.5μF				1.5 (155)	MCCA000567
MLCC,1206, Y5V, 25V, 2.2μF				2.2 (225)	MCCA000568
MLCC,1206, Y5V, 25V, 4.7μF				4.7 (475)	MCCA000569

Dimensions : Inches (Millimetres)

Specification Table

Description	Dielectric	Size	Rated Voltage (V dc)	Capacitance (μF)	Part Number
MLCC,1206, Y5V, 25V, 10μF	Y5V	1206 (3216)	25	10 (106)	MCCA000570
MLCC,1206, X7R, 50V, 1μF	X7R		50	1 (105)	MCCA000571
MLCC,1206, Y5V, 50V, 1μF	Y5V				MCCA000572
MLCC,1210, X5R, 6.3V, 22μF	X5R	1210 (3225)	6.3	22	MCCA000573
MLCC,1210, X5R, 6.3V, 100μF				100	MCCA000574
MLCC,1210, X5R, 10V, 10μF			10	10 (106)	MCCA000575
MLCC,1210, Y5V, 10V, 22μF	22 (226)			MCCA000576	
MLCC,1210, X5R, 10V, 22μF				MCCA000577	
MLCC,1210, X5R, 10V, 47μF	47 (475)			MCCA000578	
MLCC,1210, X5R, 16V, 4.7μF				MCCA000579	
MLCC,1210, Y5V, 16V, 10μF	16		10 (106)	MCCA000580	
MLCC,1210, X5R, 16V, 10μF				MCCA000581	
MLCC,1210, Y5V, 16V, 22μF			22 (226)	MCCA000582	
MLCC,1210, X5R, 16V, 22μF				MCCA000583	
MLCC,1210, X5R, 25V, 4.7μF	25		4.7	MCCA000584	
MLCC,1210, Y5V, 25V, 10μF			10 (106)	MCCA000585	
MLCC,1210, X5R, 25V, 10μF				MCCA000586	
MLCC,1210, Y5V, 50V, 4.7μF	Y5V		50	4.7 (475)	MCCA000587
MLCC,1812, X7R, 100V, 1μF	X7R	1812 (4532)	100	1 (105)	MCCA000589

Dimensions : Inches (Millimetres)



Capacitance Range (X5R)

Dielectric	X5R					
Size	0805			1206		
Rated Voltage (V dc)	6.3 (V)	10 (V)	16 (V)	6.3 (V)	10 (V)	16 (V)
0.22 (224)	-	-	-	-	-	-
1µF (105)	-	T	T	-	T	T
1.5µF (154)	-			-		
2.2 (225)	T			-		
3.3 (335)	-	-	-	-		
4.7 (475)	T	-	-	-		
6.8 (685)	-	-	-	-	-	-
10µF (106)	-	-	-	T	J	-
2.2µF (226)	-	-	-	-	-	-

Capacitance Range (Y5V)

Dielectric	Y5V				
Size	0805		1206		
Rated Voltage (V dc)	10 (V)	16 (V)	6.3 (V)	10 (V)	16 (V)
0.22 (224)	-	-	-	-	-
1µF (105)	-	-	-	-	-
1.5µF (154)	-	-	-	-	-
2.2 (225)	-	T	-	-	-
3.3 (335)	T	-	-	-	-
4.7 (475)		-	-	T	T
6.8 (685)	-	-	-		-
10µF (106)	-	-	-		J
2.2µF (226)	-	-	-	-	-

Dimensions Table

Size [Inch (mm)]	Thickness (mm)/Symbol	
0805 (2012)	0.95	T
1206 (3216)		
	1.25	J

Dimensions : Inches (Millimetres)

Dimensions

Size [Inch (mm)]	L (mm)	W (mm)	M _B (mm)
0805 (2012)	2.00 ±0.15	1.25 ±0.10	0.50 ±0.20
	2.00 ±0.20	1.25 ±0.20	
1206 (3216)	3.20 ±0.15	1.60 ±0.15	0.60 ±0.20
	3.20 ±0.20	1.60 ±0.20	
		1.60 + 0.30/-0.10	

Dimensions : Inches (Millimetres)

Specification Table

Description	Dielectric	Size [Inch (mm)]	Capacitance	Tolerance	Rated Voltage (V dc)	Part Number
MLCC, 0805, X5R, 6.3V, 2.2µF	X5R	0805 (2012)	2.2µF	±10%	6.3	MCCA000591
MLCC, 0805, X5R, 6.3V, 4.7µF		0805 (2012)	4.7µF	±10%		MCCA000592
MLCC, 0805, X5R, 6.3V, 10µF		0805 (2012)	10µF	±20%		MCCA000593
MLCC, 0805, X5R, 10V, 2.2µF		0805 (2012)	2.2µF	±10%	10	MCCA000594
MLCC, 0805, Y5V, 10V, 4.7µF	Y5V	1206 (3216)	4.7µF	-20/ +80%		MCCA000595
MLCC, 0805, X5R, 16V, 1µF	X5R	0805 (2012)	1µF	±10%	16	MCCA000596
MLCC, 0805, Y5V, 16V, 2.2µF	Y5V	0805 (2012)	2.2µF	-20/ +80%		MCCA000597
MLCC, 0805, X5R, 16V, 2.2µF	X5R	0805 (2012)	2.2µF	±10%		MCCA000598
MLCC, 0805, Y5V, 16V, 4.7µF	Y5V	0805 (2012)	4.7µF	-20/ +80%		MCCA000599

Dimensions : Inches (Millimetres)

Specification Table

Description	Dielectric	Size [Inch (mm)]	Capacitance	Tolerance	Rated Voltage (V dc)	Part Number
MLCC, 1206, X5R, 6.3V, 10 μ F	X5R	1206 (3216)	10 μ F	$\pm 20\%$	6.3	MCCA000600
MLCC, 1206, X5R, 10V, 2.2 μ F		0805 (2012)	2.2 μ F	$\pm 10\%$	10	MCCA000601
MLCC, 1206, Y5V, 10V, 10 μ F	Y5V	1206 (3216)	10 μ F	-20/ +80%		MCCA000603
MLCC, 1206, Y5V, 10V, 22 μ F		1206 (3216)	22 μ F	-20/ +80%		MCCA000604

1. This series product is suited to reflow soldering process only.

Dimensions : Inches (Millimetres)

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1. Introduction

WTC middle and high voltage series MLCC is designed by a special internal electrode pattern, which can reduce voltage concentrations by distributing voltage gradients throughout the entire capacitor. This special design also affords increased capacitance values in a given case size and voltage rating.

Chips size 1206 and larger to use on reflow soldering process only. Capacitors with X7R dielectrics are not intended for AC line filtering applications. Capacitors may require protective surface coating to prevent external arcing.

2. Features

- a. High voltage in a given case size.
- b. High stability and reliability.

3. Applications

- a. Snubbers in high frequency power converters.
- b. High voltage coupling/DC blocking.
- c. DC-DC converters.
- d. Back-lighting inverters.

Dimensions Table

Size	L (mm)	W (mm)	Thickness (mm)/Symbol		Remark	MB (mm)
0805 (2012)	2.00 ±0.15	1.25 ±0.10	0.60 ±1.0	A	-	0.50 ±0.20
			0.80 ±0.10	B	-	
			1.25 ±0.10	D	#	
1206 (3216)	3.20 ±0.15	1.60±0.15	0.80 ±0.10	B	-	0.60±0.20
			0.95 ±0.10	C	-	
			1.25 ±0.10	D	-	
	3.20 ±0.20	1.60 ±0.20	1.60 ±0.20	G	-	

Dimensions : Millimetres

General Electrical Data

Dielectric	NP0	X7R
Size	0805, 1206	
Capacitance*	0.5pF to 6800pF	100pF to 0.47μF
Capacitance tolerance***	Cap.5pF: C (±0.25pF) 5pF<Cap<10pF: D (±0.5pF) Cap.10pF: J (±5%), K (±10%)	K (±10%), M (±20%)
Rated voltage (WVDC)	200V to 3kV	
Q*	Cap<30pF: Q≥400+20C Cap.30pF: Q≥1000	≤2.5%
Insulation resistance at Ur**	Ur=200~630V: ≥10GΩ or RxC.100Ω-F whichever is smaller Ur=1000~3000V: ≥10GΩ	
Dielectric strength	200~300V: ≥2 x WV DC 500~999V: ≥1.5 x WV DC 1000~3000V: ≥1.2 x WV DC	
Operating temperature	-55 to +125°C	
Capacitance characteristic	±30ppm	±15%
Termination	Ni/Sn (lead-free termination)	

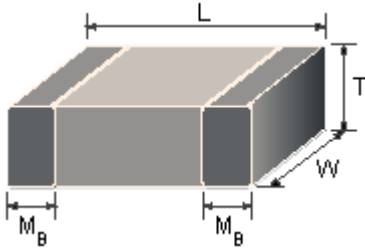
* Measured at the condition of 30~70% related humidity.

NP0: Apply 1.0 ± 0.2 Vrms, 1.0MHz $\pm 10\%$ for Cap ≤ 1000 pF and 1.0 ± 0.2 Vrms, 1.0kHz $\pm 10\%$ for Cap > 1000 pF, 25°C at ambient temperature.

X7R: Apply 1.0 ± 0.2 Vrms, 1.0kHz $\pm 10\%$, at 20°C ambient temperature.

** Measured at 500VDC for 60 seconds. for $U_r > 500$ V DC.

*** Preconditioning for Class II MLCC: Perform a heat treatment at 150 ± 10 °C for 1 hour, then leave in ambient condition for 24 ± 2 hours before measurement.



Capacitance Range (X7R Dielectric 200V to 630V)

Dielectric	X7R			
Size	0805		1206	
Rated Voltage (V dc)	200 (V)	630 (V)	200 (V)	630 (V)
0.18 μ F (184)	-	-	-	-
0.22 μ F (224)	-	-	-	-
0.27 μ F (274)	-	-	-	-
0.33 μ F (334)	-	-	-	-
0.39 μ F (394)	-	-	-	-
0.47 μ F (474)	-	-	-	-

1. The letter in cell is expressed the symbol of product thickness.

2. The letter in cell with "A" mark is expressed product with Ag/Ni/Sn terminators.

Capacitance Range (NP0 Dielectric 200V to 630V)

Dielectric	NP0		
Size	0805	1206	
Rated Voltage (V dc)	200 (V)	200 (V)	630 (V)
0.5pF (0R5)	A	-	-
1.0pF (1R0)		-	-
1.2pF (1R2)		-	-
1.5pF (1R5)		B	B
1.8pF (1R8)			
2.2pF (2R2)			
2.7pF (2R7)			
3.3pF (3R3)			
3.9pF (3R9)			

Capacitance Range (NP0 Dielectric 200V to 630V)

Dielectric	NP0			
Size	0805	1206		
Rated Voltage (V dc)	200 (V)	200 (V)	630 (V)	
4.7pF (4R7)	A	B	B	
5.6pF (5R6)				
6.8pF (6R8)				
8.2pF (8R2)				
10pF (100)				
12pF (120)				
15pF (150)				
18pF (180)				
22pF (220)				
27pF (270)				
33pF (330)				
39pF (390)				
47pF (470)				
56pF (560)				
68pF (680)				
82pF (820)				
100pF (101)				
120pF (121)				
150pF (151)				B
180pF (181)				
220pF (221)	D	C	C	
270pF (271)				
330pF (331)				
390pF (391)				
470pF (471)				
560pF (561)				
680pF (681)				
820pF (821)				
1000pF (102)	-	D	G	
1200pF (122)				
1500pF (152)				
1800pF (182)				
2200pF (222)	-	D	-	
2700pF (272)				
3300pF (392)				
3900pF (392)				
4700pF(472)	-	-	-	
5600pF (562)	-	-	-	
6800pF (682)	-	-	-	

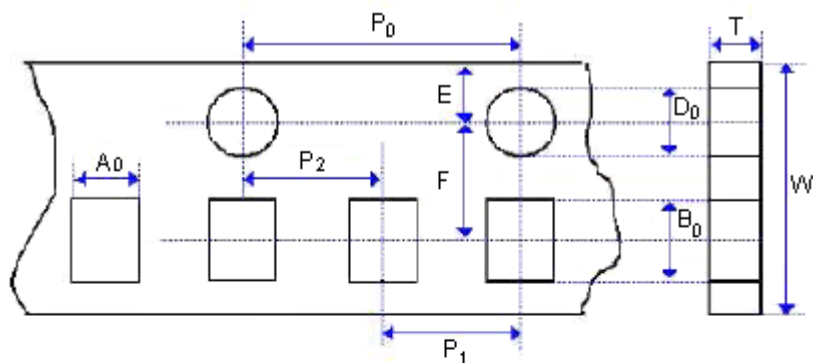
Capacitance Range (X7R Dielectric 200V to 630V)

Dielectric	X7R			
Size	0805		1206	
Rated Voltage (V dc)	200 (V)	630 (V)	200 (V)	630 (V)
100pF (101)	B	B^	-	-
120pF (121)			-	-
150pF (151)			D	D^
180pF (181)				
220pF (221)				
270pF (271)				
330pF (331)				
390pF (391)				
470pF (471)				
560pF (561)				
680pF (681)				
820pF (821)				
1000pF (102)				
1200pF (122)				
1500pF (152)				
1800pF (182)				
2200pF (222)				
2700pF (272)				
3300pF (332)				
3900pF (392)	D	-	G^	G^
4700pF (472)		-		
5600pF (562)		-		
6800pF (682)		-		
8200pF (822)		-		
0.010μF (103)		-		
0.012μF (123)		-		
0.015μF (153)		-		
0.018μF (183)		-		
0.022μF (223)		-		
0.027μF (273)	-	-		
0.033μF (333)	-	-	-	
0.039μF (393)	-	-	-	-
0.047μF (473)	-	-	-	-
0.056μF (563)	-	-	-	-
0.068μF (683)	-	-	-	-
0.082μF (823)	-	-	-	-
0.10μF (104)	-	-	-	-
0.12μF (124)	-	-	-	-
0.15μF (154)	-	-	-	-

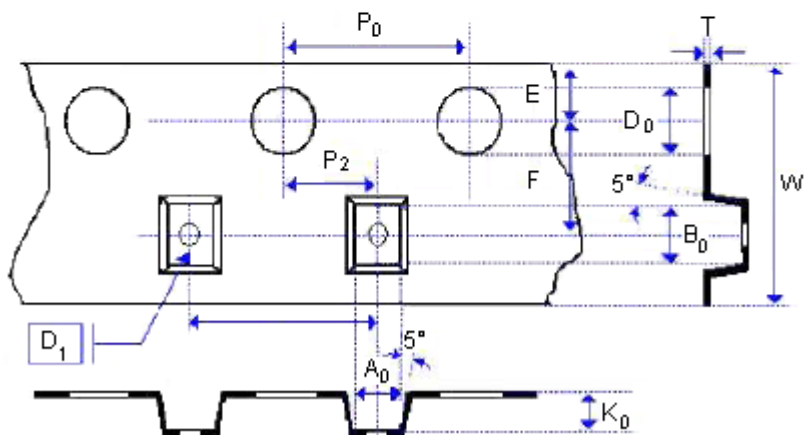
1. The letter in cell is expressed the symbol of product thickness.

Appendixes

Tape and reel dimensions

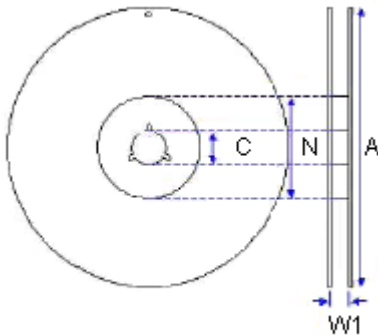


The dimension of paper tape



The dimension of plastic tape

Size	0805		1206		
Thickness	B	C, D, I	B	C, D	G
A0	1.50 ±0.10	<1.57	2.00 ±0.10	<1.85	<1.95
B0	2.30 ±0.10	<2.40	3.50 ±0.10	<3.46	<3.67
T	0.95 ±0.05	0.23 ±0.05	0.95 ±0.05	0.23 ±0.05	0.23 ±0.05
K0	-	<2.50	-	<2.50	<2.50
W	8.00 ±0.10	8.00 ±0.10	8.00 ±0.10	8.00 ±0.10	8.00 ±0.10
P0	4.00 ±0.10	4.00 ±0.10	4.00 ±0.10	4.00 ±0.10	4.00 ±0.10
10xP0	40.0 ±0.10	40.0 ±0.10	40.0 ±0.10	40.0 ±0.10	40.0 ±0.10
P1	4.00 ±0.10	4.00 ±0.10	4.00 ±0.10	4.00 ±0.10	4.00 ±0.10
P2	2.00 ±0.05	2.00 ±0.05	2.00 ±0.05	2.00 ±0.05	2.00 ±0.05
D0	1.55 ±0.05	1.50 ±0.05	1.50 ±0.05	1.50 ±0.05	1.50 ±0.05
D1	-	1.00 ±0.10	-	1.00 ±0.10	1.00 ±0.10
E	1.75 ±0.05	1.75 ±0.10	1.75 ±0.10	1.75 ±0.10	1.75 ±0.10
F	3.50 ±0.05	3.50 ±0.05	3.50 ±0.05	3.50 ±0.05	3.50 ±0.05

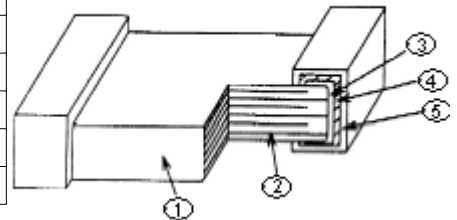


The dimension of reel

Size	0805, 1206		
Reel size	7"	10"	13"
C	13.0+0.5/-0.2	13.0+0.5/-0.2	13.0+0.5/-0.2
W1	8.4+1.5/-0	8.4 +1.5/-0	8.4+1.5/-0
A	178.0 ±0.10	250.0 ±1.0	330.0 ±1.0
N	60.0+1/-0	100.0 ±1.0	100 ±1.0

Constructions

Number	Name	NP0, X7R*	NPO, X7R,
1	Ceramic material	BaTiO ₃ based	
2	Inner electrode	AgPd alloy	Ni
3	Termination	Inner layer	Cu
4		Middle layer	Ni
5		Outer layer	Sn



The construction of MLCC

* Partial NP0;X7R items are with Ag/Ni/Sn terminations, please ref to product range of NP0;X7R dielectric for detail.

Storage and handling conditions

(1) To store products at 5 to 40°C ambient temperature and 20 to 70% related humidity conditions.

(2) The product is recommended to be used within one year after shipment. Check solderability in case of shelf life extension is needed.

Cautions:

- Don't store products in a corrosive environment such as sulfide, chloride gas, or acid. It may cause oxidization of electrode, which easily be resulted in poor soldering.
- To store products on the shelf and avoid exposure to moisture.
- Don't expose products to excessive shock, vibration, direct sunlight and so on.

Recommended soldering conditions

The lead-free termination MLCCs are not only to be used on SMT against lead-free solder paste, but also suitable against lead-containing solder paste. If the optimized solder joint is requested, increasing soldering time, temperature and concentration of N₂ within oven are recommended.

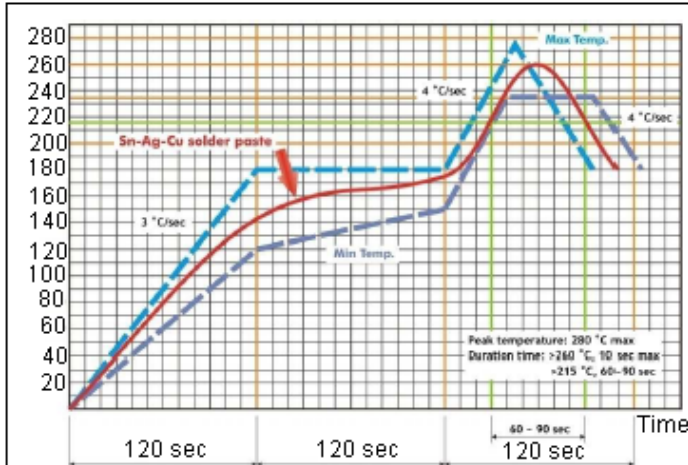


Fig. 6 Recommended IR reflow soldering profile for SMT process with SnAgCu series solder paste.

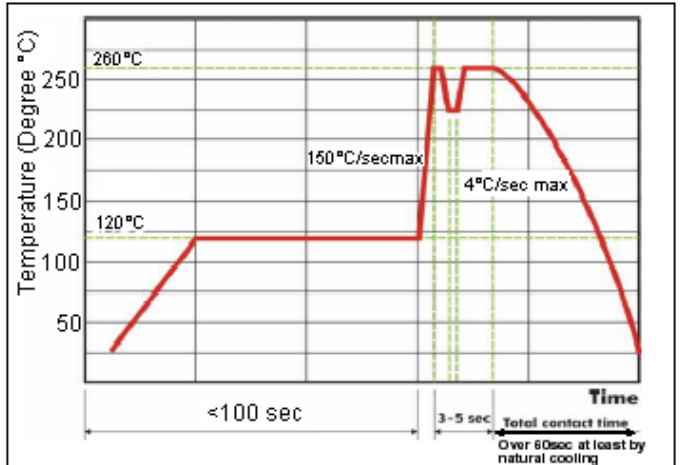


Fig. 7 Recommended wave soldering profile for SMT process with SnAgCu series solder.

Specification Table

Description	Dielectric	Size	Rated Voltage (V dc)	Capacitance (pF)	Part Number
MLCC, 0805, NP0, 200V, 15pF	NP0	0805	200	15 (150)	MCCA000606
MLCC, 0805, NP0, 200V, 22pF				22 (220)	MCCA000607
MLCC, 0805, NP0, 200V, 33pF				33 (330)	MCCA000608
MLCC, 0805, NP0, 200V, 47pF				47 (470)	MCCA000609
MLCC, 0805, NP0, 200V, 68pF				68 (680)	MCCA000610
MLCC, 0805, NP0, 200V, 100pF				100 (101)	MCCA000611
MLCC, 0805, NP0, 200V, 150pF				150 (151)	MCCA000612
MLCC, 0805, X7R, 200V, 220pF	X7R			220 (221)	MCCA000613
MLCC, 0805, NP0, 200V, 220pF	NP0				MCCA000614
MLCC, 0805, X7R, 200V, 330pF	X7R			330 (331)	MCCA000615
MLCC, 0805, NP0, 200V, 330pF	NP0				MCCA000616
MLCC, 0805, X7R, 200V, 470pF	X7R			470 (471)	MCCA000617
MLCC, 0805, X7R, 200V, 680pF				680 (681)	MCCA000618
MLCC, 0805, X7R, 200V, 1nF				1,000 (102)	MCCA000619
MLCC, 0805, X7R, 200V, 1.5nF				1,500 (152)	MCCA000620
MLCC, 0805, X7R, 200V, 2.2nF				2,200 (222)	MCCA000621
MLCC, 0805, X7R, 200V, 3.3nF				3,300 (332)	MCCA000622
MLCC, 0805, X7R, 200V, 4.7nF				4,700 (472)	MCCA000623
MLCC, 0805, X7R, 200V, 6.8nF				6,800 (682)	MCCA000624
MLCC, 0805, X7R, 200V, 10nF				10,000 (103)	MCCA000625

Dimensions : Inches (Millimetres)

Specification Table

Description	Dielectric	Size	Rated Voltage (V dc)	Capacitance (pF)	Part Number
MLCC, 1206, NP0, 200V, 1nF	NP0	1206	200	1,000 (102)	MCCA000626
MLCC, 1206, X7R, 200V, 15nF	X7R			1,500 (152)	MCCA000627
MLCC, 1206, X7R, 200V, 22nF				2,200 (222)	MCCA000628
MLCC, 1206, NP0, 630V, 100pF	NP0		630	100 (101)	MCCA000629
MLCC, 1206, X7R, 630V, 1nF	X7R			1,000 (102)	MCCA000630
MLCC, 1206, X7R, 630V, 2.2nF				2,200 (222)	MCCA000631
MLCC, 1206, X7R, 630V, 4.7nF				4700 (472)	MCCA000632
MLCC, 1206, X7R, 630V, 10nF				10,000 (103)	MCCA000633

Dimensions : Inches (Millimetres)

Part Number Explanation:

MLCC 0805 (2012)

Size

N

Dielectric

200

Rated voltage

Size: : MLCC 1206 (3216)
Dielectric: : N : F = Y5V.
Rated voltage: : Two significant digits followed by no. of zeros and R is in place of decimal point.

201 = 200 VDC
 251 = 250 VDC
 501 = 500 VDC
 631 = 630 VDC
 102 = 1000 VDC
 202 = 2000 VDC
 302 = 3000 VDC

* Partial NP0;X7R items are with Ag/Ni/Sn terminations, please ref to below product range of NP0;X7R dielectric for detail.

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