





#### **Description**

MLCC consists of a conducting material and electrodes. To manufacture a chip-type SMT and achieve miniaturization, high density and high efficiency, ceramic condensers are used. WTC's MLCC is made by NP0, X7R and X5R dielectric material and which provides product with high electrical precision, stability and reliability.

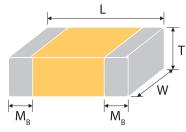
#### Features:

- · A wide selection of sizes is available (0402 to 1210)
- · High capacitance in given case size
- Capacitor with lead-free termination (pure Tin)

#### Applications:

- · For general digital circuit
- · For power supply bypass capacitors
- · For consumer electronics
- · For telecommunication

#### **External Dimensions:**



The outline of MLCC

Size Inch (mm)	L (mm)	W (mm)	T (mm)/Symb	ool	Remark	MB (mm)
0402 (1005)	1 ±0.05	0.5 ±0.05	0.5 ±0.05	N	#	0.25 +0.05/-0.1
	1.6 ±0.1	0.8 ±0.1	0.8 ±0.07	S	-	
0603 (1608)	1.6 +0.15/-0.1	0.8 +0.15/-0.1	0.8 +0.15/-0.1	Х	-	0.4 ±0.15
			0.6 ±0.1	Α	-	
0805 (2012)	2 ±0.15	1.25 ±0.1	0.8 ±0.1	В	-	0.5 ±0.2
0803 (2012)			1.25 ±0.1	D	#	0.5 ±0.2
	2 ±0.2	1.25 ±0.2	1.25 ±0.2	Ι	#	
			0.8 ±0.1	В	-	
			0.95 ±0.1	С	-	
	3.2 ±0.15	1.6 ±0.15	1.15 ±0.15	J	#	
1206 (3216)			1.25 ±0.1	D	#	0.6 ±0.2
			1.6 ±0.2	G	#	
	3.2 +0.3/-0.1	1.6 +0.3/0.1	1.6 +0.3/-0.1	Р	#	
	3.2 ±0.3	2.5 ±0.2	0.95 ±0.1	С	#	
	3.2 ±0.3	2.5 ±0.2	1.25 ±0.1	D	#	
1210 (3225)			1.6 ±0.2	G	#	0.75 ±0.25
	3.2 ±0.4	2.5 ±0.3	2 ±0.2	Κ	#	
			2.5 ±0.3	М	#	
1912 (4522)	4.5 ±0.4	3.2 ±0.3	1.25 ±0.1	D	#	0.75 ±0.25
1812 (4532)	4.0 IU.4	3.2 IU.3	2 ±0.2	K	#	0.75 ±0.25

<sup>#</sup> Reflow soldering only is recommended.





#### **General Electrical Data:**

Dielectric	NP0	X7R	Y5V						
Size	0402, 0603, 0	805, 1206, 1210, 1812							
Capacitance*	0.5pF to 0.1μF	100pF to 0.82μF	10nF to 0.68µF						
Capacitance tolerance**	Cap≤5pF: B (±0.1pF), C (±0.25pF) 5pF <cap<10pf: (±0.25pf),="" (±0.5pf)="" (±1%),="" (±10%)<="" (±2%),="" (±5%),="" c="" cap≥10pf:="" d="" f="" g="" j="" k="" th=""><th>J (±5%), K (±10%), M (±20%)</th><th>M (±20%), Z (-20/+80%)</th></cap<10pf:>	J (±5%), K (±10%), M (±20%)	M (±20%), Z (-20/+80%)						
Rated voltage (WVDC)	10V, 16V, 25V, 50V, 100V	6.3V, 10V, 16V,	25V, 50V, 100V						
DF (Tan δ)*	Cap<30pF: Q≥400+20C Cap≥30pF: Q≥1000	No	te 1						
Operating temperature	-55°C to +125°C		-55°C to +85°C						
Capacitance change	±30ppm	±1	5%						
Termination	Ni/Sn (lead-free termination)								

<sup>\*</sup> Measured at the condition of 30~70% related humidity.

### Note 1: X7R/X5R

Rated vol.	D.F.≦		Exception of D.F. ≦
		≦3%	0201(50V); 0603≧0.047μF; 0805≧0.18μF;1206≧0.47μF
≧50V	≦2.5%	≦5%	1210≧4.7μF
		≦10%	0603≥1μF; 0805≥1μF;1206≥4.7μF; 1210≥10μF
35V	≦3.5%	≦10%	0805≥2.2μF; 1210≧10μF
		≦5%	0201≧0.01μF;0805≧1μF; 1210≧10μF
25V	≦3.5%	≦7%	0603≧0.33μF; 1206≧4.7μF
		≦10%	0402≧0.10μF;0603≧0.47μF; 0805≧2.2μF; 1206≧6.8μF ; 1210≧22μF
16V	≦3.5%	≦5%	0201≥0.01μF; 0402≥0.033μF; 0805≥0.68μF;1206≥2.2μF;1210≥4.7μF
100	≧3.5%	≦10%	0402≧0.47μF; 0603≧0.68μF;0805≧2.2μF; 1206≧4.7μF; 1210≧22μF; TT series
10V	≦5%	≦10%	0402≥0.33μF; 0603≥0.33μF; 0805≥2.2μF; 1206≥2.2μF; 1210≥22μF; TT series
100	≧5%	≦15%	0201≥0.1μF; 0402≥1μF
6.3V	-100/	≦15%	0201≧0.1μF; 0402≧1μF; 0603≧10μF; 0805≧4.7μF; 1206≧47μF; 1210≧100μF
0.50	≦10%	≦20%	0402≧2.2μF
4V	≦15%	-	-

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NP0: Apply 1 ±0.2Vrms, 1MHz ±10% for Cap≤1,000pF and 1 ±0.2Vrms, 1kHz ±10% for Cap>1,000pF, 25°C at ambient temperature

X7R: Apply 1.0±0.2Vrms, 1.0kHz±10%, at 25°C ambient temperature.

Y5V: Apply 1.0±0.2Vrms, 1.0kHz±10%, at 20°C ambient temperature.

<sup>\*\*</sup> 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.



#### Y5V

Rated vol.	D.F.≦		Exception of D.F. ≦
≧50V	5%	7%	0603≧0.1μF; 0805≧0.47μF; 1206≧4.7μF
35V	7%	-	-
25\/	5%	7%	0402≥0.047μF; 0603≥0.1μF; 0805≥0.33μF; 1206≥1μF; 1210≥4.7μF
25V	3%	9%	0402≥0.068μF; 0603≥0.47μF; 1206≥4.7μF; 1210≥22μF
16V	7%	9%	0402≧0.068μF; 0603≧0.68μF
(C<1.0µF)	1 70	12.5%	0402≧0.22μF
16V (C≧1.0µF)	9%	12.5%	0603≧2.2μF; 0805≧3.3μF; 1206≧10μF; 1210≧22μF; 1812≧47μF
10V	12.5%	20%	0402≧0.47μF
6.3V	20%	-	-

### **Capacitance Range (NP0 Dielectric)**

	Dielectric								NP0							
	Size			0402					0603					0805		
	Rated Voltage	10	16	25	50	100	10	16	25	50	100	10	16	25	50	100
	0.1pF (0R1)	N	N	N	N											
	0.2pF (0R2)	N	N	N	N											
	0.3pF (0R3)	N	N	N	N											
	0.4pF (0R4)	N	N	N	N											
	0.5pF (0R5)	N	N	N	N	N	S	S	S	S	S	Α	Α	Α	Α	Α
	0.6pF (0R6)	N	N	N	N	N	S	S	S	S	S	Α	Α	Α	Α	Α
	0.7pF (0R7)	N	N	N	N	N	S	S	S	S	S	Α	Α	Α	Α	Α
	0.8pF (0R8)	N	N	N	N	N	S	S	S	S	S	Α	Α	Α	Α	Α
	0.9pF (0R9)	N	N	N	N	N	S	S	S	S	S	Α	Α	Α	Α	Α
"	1.0pF (1R0)	N	N	N	N	N	S	S	S	S	S	Α	Α	Α	Α	Α
Capacitance	1.2pF (1R2)	N	N	N	N	N	S	S	S	S	S	Α	Α	Α	Α	Α
acita	1.5pF (1R5)	N	N	N	N	N	S	S	S	S	S	Α	Α	Α	Α	Α
Sap	1.8pF (1R8)	N	N	N	N	N	S	S	S	S	S	Α	Α	Α	Α	Α
	2.2pF (2R2)	N	N	N	N	N	S	S	S	S	S	Α	Α	Α	Α	Α
	2.7pF (2R7)	N	N	N	N	N	S	S	S	S	S	Α	Α	Α	Α	Α
	3.3pF (3R3)	N	N	N	N	N	S	S	S	S	S	Α	Α	Α	Α	Α
	3.9pF (3R9)	N	N	N	N	N	S	S	S	S	S	Α	Α	Α	Α	Α
	4.7pF (4R7)	N	N	N	N	N	S	S	S	S	S	Α	Α	Α	Α	Α
	5.6pF (5R6)	N	N	N	N	N	S	S	S	S	S	Α	Α	Α	Α	Α
	6.8pF (6R8)	N	N	N	N	N	S	S	S	S	S	Α	Α	Α	Α	Α
	8.2pF (8R2)	N	N	N	N	N	S	S	S	S	S	Α	Α	Α	Α	Α
	10pF (100)	N	N	N	N	N	S	S	S	S	S	Α	Α	Α	Α	Α
	12pF (120)	N	N	N	N	N	S	S	S	S	S	Α	А	А	Α	А





### **Capacitance Range (NP0 Dielectric)**

	Dielectric								NP0							
	Size			0402					0603					0805		
	Rated Voltage	10	16	25	50	100	10	16	25	50	100	10	16	25	50	100
	15pF (150)	N	N	N	N	N	S	S	S	S	S	Α	Α	Α	Α	Α
	18pF (180)	N	N	N	N	N	S	S	S	S	S	Α	Α	Α	Α	Α
	22pF (220)	N	N	N	N	N	S	S	S	S	S	Α	Α	Α	Α	Α
	27pF (270)	N	N	N	N	N	S	S	S	S	S	Α	Α	Α	Α	Α
	33pF (330)	N	N	N	N	N	S	S	S	S	S	Α	Α	Α	Α	Α
	39pF (390)	N	N	N	N	N	S	S	S	S	S	Α	Α	Α	Α	Α
	47pF (470)	N	N	N	N	N	S	S	S	S	S	Α	Α	Α	Α	Α
	56pF (560)	N	N	N	N	N	S	S	S	S	S	Α	Α	Α	Α	Α
	68pF (680)	N	N	Ν	N	N	S	S	S	S	S	Α	Α	Α	Α	Α
	82pF (820)	N	N	N	Ν	N	S	S	S	S	S	Α	Α	Α	Α	Α
	100pF (101)	N	N	N	N	N	S	S	S	S	S	Α	Α	Α	Α	Α
	120pF (121)	N	N	N	N	N	S	S	S	S	S	Α	Α	Α	Α	Α
	150pF (151)	N	N	N	Ν	N	S	S	S	S	S	Α	Α	Α	Α	Α
	180pF (181)	N	N	Ν	Ν	N	S	S	S	S	S	Α	Α	Α	Α	Α
	220pF (221)	N	Ν	Ν	Ν	N	S	S	S	S	S	Α	Α	Α	Α	Α
e e	270pF (271)	N	Ν	N	Ν		S	S	S	S	S	Α	Α	Α	Α	Α
itan	330pF (331)	N	N	N	N		S	S	S	S	S	Α	Α	Α	Α	Α
Capacitance	390pF (391)	N	N	N	N		S	S	S	S	S	В	В	В	В	В
ပြိ	470pF (471)	N	N	N	N		S	S	S	S	S	В	В	В	В	В
	560pF (561)	N	N	N	N		S	S	S	S	S	В	В	В	В	В
	680pF (681)	N	N	N	N		S	S	S	S	S	В	В	В	В	В
	820pF (821)	N	N	N	N		S	S	S	S	S	В	В	В	В	В
	1,000pF (102)	N	N	N	N		S	S	S	S	S	В	В	В	В	В
	1,200pF (122)						Х	Х	Х	Х		В	В	В	В	В
	1,500pF (152)						Х	Х	Х	Х		В	В	В	В	В
	1,800pF (182)						Х	Х	Х	Х		В	В	В	В	В
	2,200pF (222)						Х	Х	Х	Х		В	В	В	В	В
	2,700pF (272)						Х	Х	Х	Х		D	D	D	D	D
	3,300pF (332)						Х	Х	Х	Х		D	D	D	D	D
	3,900pF (392)											D	D	D	D	D
	4,700pF (472)											D	D	D	D	D
	5,600pF (562)											D	D	D	D	
	6,800pF (682)											D	D	D	D	
	8,200pF (822)											D	D	D	D	







### **Capacitance Range (NP0 Dielectric)**

	Dielectric		NP0													
	Size			0402					0603					0805		
	Rated Voltage	10	16	25	50	100	10	16	25	50	100	10	16	25	50	100
ce	0.010µF (103)											D	D	D	D	
citan	0.012µF (123)											D^	D^			
apac	0.018µF (183)											D	D	D	D	D
Ca	0.022µF (223)											D	D	D	D	D

- 1. The letter in cell is expressed the symbol of product thickness.
- 2. The letter in cell with "^" mark is expressed product with Ag/Ni/Sn terminations

	Dielectric					1	NF	20						
	Size			1206					1210				1812	
	Rated Voltage	10	16	25	50	100	10	16	25	50	100	16	50	100
	1.0pF (1R0)													
	1.2pF (1R2)	В	В	В	В	В								
	1.5pF (1R5)	В	В	В	В	В								
	1.8pF (1R8)	В	В	В	В	В								
	2.2pF (2R2)	В	В	В	В	В								
	2.7pF (2R7)	В	В	В	В	В								
	3.3pF (3R3)	В	В	В	В	В								
	3.9pF (3R9)	В	В	В	В	В								
	4.7pF (4R7)	В	В	В	В	В								
	5.6pF (5R6)	В	В	В	В	В								
	6.8pF (6R8)	В	В	В	В	В								
ance	8.2pF (8R2)	В	В	В	В	В								
acita	10pF (100)	В	В	В	В	В	С	С	С	С	С	D	D	D
Capacitance	12pF (120)	В	В	В	В	В	С	С	С	С	С	D	D	D
	15pF (150)	В	В	В	В	В	С	С	С	С	С	D	D	D
	18pF (180)	В	В	В	В	В	С	С	С	С	С	D	D	D
	22pF (220)	В	В	В	В	В	С	С	С	С	С	D	D	D
	27pF (270)	В	В	В	В	В	С	С	С	С	С	D	D	D
	33pF (330)	В	В	В	В	В	С	С	С	С	С	D	D	D
	39pF (390)	В	В	В	В	В	С	С	С	С	С	D	D	D
	47pF (470)	В	В	В	В	В	С	С	С	С	С	D	D	D
	56pF (560)	В	В	В	В	В	С	С	С	С	С	D	D	D
	68pF (680)	В	В	В	В	В	С	С	С	С	С	D	D	D
	82pF (820)	В	В	В	В	В	С	С	С	С	С	D	D	D
	100pF (101)	В	В	В	В	В	С	С	С	С	С	D	D	D





	Dielectric						NF	90						
	Size			1206		,			1210				1812	
	Rated Voltage	10	16	25	50	100	10	16	25	50	100	16	50	100
	120pF (121)	В	В	В	В	В	С	С	С	С	С	D	D	D
	150pF (151)	В	В	В	В	В	С	С	С	С	С	D	D	D
	180pF (181)	В	В	В	В	В	С	С	С	С	С	D	D	D
	220pF (221)	В	В	В	В	В	С	С	С	С	С	D	D	D
	270pF (271)	В	В	В	В	В	С	С	С	С	С	D	D	D
	330pF (331)	В	В	В	В	В	С	С	С	С	С	D	D	D
	390pF (391)	В	В	В	В	В	С	С	С	С	С	D	D	D
	470pF (471)	В	В	В	В	В	С	С	С	С	С	D	D	D
	560pF (561)	В	В	В	В	В	С	С	С	С	С	D	D	D
	680pF (681)	В	В	В	В	В	С	С	С	С	С	D	D	D
	820pF (821)	В	В	В	В	В	С	С	С	С	С	D	D	D
	1,000pF (102)	В	В	В	В	В	С	С	С	С	С	D	D	D
	1,200pF (122)	В	В	В	В	В	С	С	С	С	С	D	D	D
	1,500pF (152)	В	В	В	В	В	С	С	С	С	С	D	D	D
	1,800pF (182)	В	В	В	В	В	С	С	С	С	С	D	D	D
	2,200pF (222)	В	В	В	В	В	С	С	С	С	С	D	D	D
<u>e</u>	2,700pF (272)	В	В	В	В	В	С	С	С	С	С	D	D	D
itan	3,300pF (332)	В	В	В	В	В	С	С	С	С	С	D	D	D
Capacitance	3,900pF (392)	В	В	В	В	В	С	С	С	С	С	D	D	D
ပြီ	4,700pF (472)	В	В	В	В	В	С	С	С	С	С	D	D	D
	5,600pF (562)	В	В	В	В	В	С	С	С	С	С	D	D	D
	6,800pF (682)	С	С	С	С	С	С	С	С	С	С	D	D	D
	8,200pF (822)	D	D	D	D	D	С	С	С	С	С	D	D	D
	0.010µF (103)	D	D	D	D	D	С	С	С	С	С	D	D	D
	0.012µF (123)	D^	D^				С	С	D	D	D	D	D	D
	0.015µF (153)	D^	D^				С	С	D	D	D	D	D	D
	0.018µF (183)	D^	D^									D	D	D
	0.022µF (223)	D^	D^									D	D	D
	0.027µF (273)	D^	D^									D	D	D
	0.033µF (333)	D^	D^									D	D	D
	0.039µF (393)	G^	G^	J	J									
	0.047µF (473)	J	J	J	J									
	0.056µF (563)	J	J	J	J									
	0.068µF (683)	G	G	G	G									
	0.082µF (823)	G	G	G	G									
	0.1µF (104)	G	G	G	G									





- 1. The letter in cell is expressed the symbol of product thickness.
- 2. The letter in cell with "^" mark is expressed product with Ag/Ni/Sn terminations.

### **Capacitance Range (X7R Dielectric)**

	Dielectric								X7R						
	Size		04	02				0603					0805		
F	Rated Voltage (V DC)	10	16	25	50	10	16	25	50	100	10	16	25	50	100
	100pF (101)	N	N	N	N	S	S	S	S	S	В	В	В	В	В
li	120pF (121)	N	N	N	N	S	S	S	S	S	В	В	В	В	В
	150pF (151)	N	N	N	N	S	S	S	S	S	В	В	В	В	В
ll	180pF (181)	N	N	N	N	S	S	S	S	S	В	В	В	В	В
li	220pF (221)	N	N	N	N	S	S	S	S	S	В	В	В	В	В
	270pF (271)	N	N	N	N	S	S	S	S	S	В	В	В	В	В
	330pF (331)	N	N	N	N	S	S	S	S	S	В	В	В	В	В
	390pF (391)	N	N	N	N	S	S	S	S	S	В	В	В	В	В
	470pF (471)	N	N	N	N	S	S	S	S	S	В	В	В	В	В
	560pF (561)	N	N	N	N	S	S	S	S	S	В	В	В	В	В
	680pF (681)	N	N	N	N	S	S	S	S	S	В	В	В	В	В
	820pF (821)	N	N	N	N	S	S	S	S	S	В	В	В	В	В
	1,000pF (102)	N	N	N	N	S	S	S	S	S	В	В	В	В	В
ا ا	1,200pF (122)	N	N	N	N	S	S	S	S	S	В	В	В	В	В
anc	1,500pF (152)	N	N	N	N	S	S	S	S	S	В	В	В	В	В
acit	1,800pF (182)	N	N	N	N	S	S	S	S	S	В	В	В	В	В
Capacitance	2,200pF (222)	N	N	N	N	S	S	S	S	S	В	В	В	В	В
	2,700pF (272)	N	N	N	N	S	S	S	S	S	В	В	В	В	В
	3,300pF (332)	N	N	N	N	S	S	S	S	S	В	В	В	В	В
	3,900pF (392)	N	N	N	N	S	S	S	S	S	В	В	В	В	В
	4,700pF (472)	N	N	N	N	S	S	S	S	S	В	В	В	В	В
	5,600pF (562)	N	N	N	N	S	S	S	S	S	В	В	В	В	В
	6,800pF (682)	N	N	N	N	S	S	S	S	S	В	В	В	В	В
	8,200pF (822)	N	N	N	N	S	S	S	S	S	В	В	В	В	В
	0.010µF (103)	N	N	N	N	S	S	S	S	S	В	В	В	В	В
	0.012µF (123)	N	N	N		S	S	S	S		В	В	В	В	В
	0.015µF (153)	N	N	N		S	S	S	S		В	В	В	В	В
	0.018µF (183)	N	N	N		S	S	S	S		В	В	В	В	В
	0.022µF (223)	N	N	N		S	S	S	S		В	В	В	В	В
	0.027µF (273)	N	N	N		S	S	S	S		В	В	В	В	D
	0.033µF (333)	N	N	N		S	S	S	Х		В	В	В	В	D





	Dielectric								X7R				1		
	Size		04	02				0603					0805		
F	Rated Voltage (V DC)	10	16	25	50	10	16	25	50	100	10	16	25	50	100
	0.039µF (393)	N	N	N		S	S	S	Х		В	В	В	В	D
	0.047µF (473)	N	N	N		S	S	S	Х		В	В	В	В	D
	0.056µF (563)	N	Ν			S	S	S	Х		В	В	В	В	D
	0.068µF (683)	N	N			S	S	S	Х		В	В	В	В	D
	0.082µF (823)	N	N			S	S	S	Х		В	В	В	В	D
	0.10µF (104)	N	N			S	S	S	Х		В	В	В	В	D
۱,	0.12µF (124)					S	S	Х			В	В	В	D	
Capacitance	0.15µF (154)					S	S	Х			D	D	D	D	
acita	0.18µF (184)					S	S	Х			D	D	D	D	
)ab	0.22µF (224)					S	S	Х			D	D	D	D	
	0.27µF (274)					Х	Х	Х			D	D	D	I	
	0.33µF (334)					Х	Х	Х			D	D	D	ı	
	0.39µF (394)					Х	Х	Х			D	D	D	I	
	0.47µF (474)					Х	Х	Х			D	D	D	I	
	0.56µF (564)					Х	Х				D	D	D		
	0.68µF (684)					Х	Х				D	D	D		
	0.82µF (824)					Х	Х				D	D	D		

<sup>1.</sup> The letter in cell is expressed the symbol of product thickness.

### **Capacitance Range (X7R Dielectric)**

	Dielectric								X7R							
	Size			1206					1210					1812		
	Rated Voltage	10	16	25	50	100	10	16	25	50	100	10	16	25	50	100
	100pF (101)															
	120pF (121)															
	150pF (151)	В	В	В	В	В										
	180pF (181)	В	В	В	В	В										
"	220pF (221)	В	В	В	В	В										
Capacitance	270pF (271)	В	В	В	В	В										
acit:	330pF (331)	В	В	В	В	В										
Sap.	390pF (391)	В	В	В	В	В										
	470pF (471)	В	В	В	В	В										
	560pF (561)	В	В	В	В	В										
	680pF (681)	В	В	В	В	В										
	820pF (821)	В	В	В	В	В										
	1,000pF (102)	В	В	В	В	В	С	С	С	С	С	D	D	D	D	D





	Dielectric	X7R														
	Size			1206					1210					1812		
	Rated Voltage	10	16	25	50	100	10	16	25	50	100	10	16	25	50	100
	1,200pF (122)	В	В	В	В	В	С	С	С	С	С	D	D	D	D	D
	1,500pF (152)	В	В	В	В	В	С	С	С	С	С	D	D	D	D	D
	1,800pF (182)	В	В	В	В	В	С	С	С	С	С	D	D	D	D	D
	2,200pF (222)	В	В	В	В	В	С	С	С	С	С	D	D	D	D	D
	2,700pF (272)	В	В	В	В	В	С	С	С	С	С	D	D	D	D	D
	3,300pF (332)	В	В	В	В	В	С	С	С	С	С	D	D	D	D	D
	3,900pF (392)	В	В	В	В	В	С	С	С	С	С	D	D	D	D	D
	4,700pF (472)	В	В	В	В	В	С	С	С	С	С	D	D	D	D	D
	5,600pF (562)	В	В	В	В	В	С	С	С	С	С	D	D	D	D	D
	6,800pF (682)	В	В	В	В	В	С	С	С	С	С	D	D	D	D	D
	8,200pF (822)	В	В	В	В	В	С	С	С	С	С	D	D	D	D	D
	0.010µF (103)	В	В	В	В	В	С	С	С	С	С	D	D	D	D	D
	0.012µF (123)	В	В	В	В	В	С	С	С	С	С	D	D	D	D	D
	0.015µF (153)	В	В	В	В	В	С	С	С	С	С	D	D	D	D	D
	0.018µF (183)	В	В	В	В	В	С	С	С	С	С	D	D	D	D	D
d)	0.022µF (223)	В	В	В	В	В	С	С	С	С	С	D	D	D	D	D
Capacitance	0.027µF (273)	В	В	В	В	В	С	С	С	С	С	D	D	D	D	D
acit	0.033µF (333)	В	В	В	В	В	С	С	С	С	С	D	D	D	D	D
Sap	0.039µF (393)	В	В	В	В	В	С	С	С	С	С	D	D	D	D	D
_	0.047µF (473)	В	В	В	В	В	С	С	С	С	С	D	D	D	D	D
	0.056µF (563)	В	В	В	В	В	С	С	С	С	С	D	D	D	D	D
	0.068µF (683)	В	В	В	В	В	С	С	С	С	С	D	D	D	D	D
	0.082µF (823)	В	В	В	В	D	С	С	С	С	С	D	D	D	D	D
	0.10µF (104)	В	В	В	В	D	С	С	С	С	С	D	D	D	D	D
	0.12µF (124)	В	В	В	В	D	С	С	С	С	С	D	D	D	D	D
	0.15µF (154)	С	С	С	С	G	С	С	С	С	D	D	D	D	D	D
	0.18µF (184)	С	С	С	С	G	С	С	С	С	D	D	D	D	D	D
	0.22µF (224)	С	С	С	С	G	С	С	С	С	D	D	D	D	D	D
	0.27µF (274)	С	С	С	D	G	С	С	С	С	G	D	D	D	D	D
	0.33µF (334)	С	С	С	D	G	С	С	С	D	G	D	D	D	D	D
	0.39µF (394)	С	С	J	Р	G	С	С	С	D	М	D	D	D	D	D
	0.47µF (474)	J	J	J	Р	G	С	С	С	D	М	D	D	D	D	K
	0.56µF (564)	J	J	J	Р	Р	D	D	D	D	М	D	D	D	D	K
	0.68µF (684)	J	J	J	Р	Р	D	D	D	D	K	D	D	D	K	K
	0.82µF (824)	J	J	J	Р	Р	D	D	D	D	K	D	D	D	K	K

<sup>1.</sup> The letter in cell is expressed the symbol of product thickness.





### **Capacitance Range (Y5V Dielectric)**

	Dielectric	Y5V													
	Size			0402				06	03				0805		
F	Rated Voltage	6.3	10	16	25	50	10	16	25	50	10	16	25	50	100
	0.010µF (103)		N	N	N	N	S	S	S	S	Α	Α	Α	Α	В
	0.015µF (153)		N	N	N	Ν	S	S	S	S	Α	Α	Α	Α	В
	0.022µF (223)		N	N	N	Ν	S	S	S	S	Α	Α	Α	Α	В
	0.033µF (333)		N	N	N	N	S	S	S	S	Α	Α	Α	Α	В
8	0.047µF (473)		N	N	N		S	S	S	S	Α	Α	Α	Α	В
Capacitance	0.068µF (683)		N	N	N		S	S	S	S	Α	Α	Α	Α	В
pac	0.10µF (104)		N	N	N		S	S	S	S	Α	Α	Α	Α	В
ပြီ	0.15µF (154)		Ν	N			S	S	S	S	Α	Α	Α	Α	
	0.22µF (224)	N	N	N	N		S	S	S	S	Α	Α	Α	Α	
	0.33µF (334)	N	N	N			S	S	S		В	В	В	В	
	0.47µF (474)	N	N	N			S	S	Х	S	В	В	В	В	
	0.68µF (684)	N					S	Х			В	В	D	D	

	Dielectric	Y5V														
	Size			1206					1210					1812		
	Rated Voltage		16	25	50	100	10	16	25	50	100	10	16	25	50	100
	0.010µF (103)	В	В	В	В	В					С					D
	0.015µF (153)	В	В	В	В	В					С					D
	0.022µF (223)	В	В	В	В	В					С					D
	0.033µF (333)	В	В	В	В	В					С					D
e e	0.047µF (473)	В	В	В	В	В					С					D
Capacitance	0.068µF (683)	В	В	В	В	В					С					D
pac	0.10µF (104)	В	В	В	В	В	С	С	С	С	С	D	D	D	D	D
ပ္ပ	0.15µF (154)	В	В	В	В	С	С	С	С	С	С	D	D	D	D	D
	0.22µF (224)	В	В	В	В	С	С	С	С	С	С	D	D	D	D	D
	0.33µF (334)	В	В	В	В		С	С	С	С	С	D	D	D	D	D
	0.47µF (474)	В	В	В	В		С	С	С	С		D	D	D	D	D
	0.68µF (684)	В	В	В	В		С	С	С	С		D	D	D	D	D

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### **Packaging Dimension And Quantity:**

6:	Thickness (mans)/	Suma la a l	Pape	r tape	Plast	ic tape
Size	Thickness (mm)/S	Symbol	7" reel	13" reel	7" reel	13" reel
0402 (1005)	0.5 ±0.05	N	10k	50k	-	-
0000 (4000)	0.8 ±0.07	S	4k	15k	-	-
0603 (1608)	0.8 +0.15/-0.1	Х	4k	15k	-	-
	0.6 ±0.1	А	4k	15k	-	-
0005 (2012)	0.8 ±0.1	В	4k	15k	-	-
0805 (2012)	1.25 ±0.1	D	-	-	3k	10k
	1.25 ±0.2	I	-	-	3k	10k
	0.8 ±0.1	В	4k	15k	-	-
	0.95 ±0.1	С	-	-	3k	10k
1000 (2010)	1.15 ±0.15	J	-	-	3k	10k
1206 (3216)	1.25 ±0.1	D	-	-	3k	10k
	1.6 ±0.2	G	-	-	2k	10k
	1.6 +0.3/-0.1	Р	-	-	2k	9k
	0.95 ±0.1	С	-	-	3k	10k
	1.25 ±0.1	D	-	-	3k	10k
1210 (3225)	1.6 ±0.2	G	-	-	2k	-
	2 ±0.2	K	-	-	1k	6k
	2.5 ±0.3	М	-	-	1k	6k
4040 (4500)	1.25 ±0.1	D	-	-	1k	5k
1812 (4532)	2 ±0.2	К	-	-	1k	-

Unit: pieces

### **Reliability Test Conditions and Requirements:**

No	Item	Test Condition	Requirements
1	Visual and Mechanical	-	No remarkable defect. Dimensions to conForm to individual specification sheet.

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No	Item	Test Condition			Re	quirements
2	Capacitance		Shall no	t exceed t	he limits	given in the detailed spec.
			NP0: Ca X7R, X5		Q≥1000;	Cap<30pF,Q≥400+20C
			Rated vol.	D.F.≦		Exception of D.F. ≦
					≦3%	0201(50V); 0603≧0.047µF; 0805≧0.18µF;1206≧0.47µF
			   ≥50V	≦2.5%	≦5%	1210≧4.7µF
		Class I: NP0 Cap≤1,000pF 1 ±0.2Vrms, 1MHz±10%	=00 V	=2.570	≦10%	0603≥1μF; 0805≥1μF;1206≥4.7μF; 1210≥10μF
		Cap>1,000pF 1 ±0.2Vrms, 1KHz±10% Class II: X7R, X5R, Y5V	35V	≦3.5%	≦10%	0805≥2.2μF; 1210≧10μF
		Cap≤10µF, 1 ±0.2Vrms, 1kHz ±10% ** Cap>10µF, 0.5 ±0.2Vrms, 120Hz	25V		≦5%	0201≧0.01µF;0805≧1µF; 1210≧10µF
		±20%		<b>≤3.5%</b>	≦7%	0603≧0.33μF; 1206≧4.7μF
3	Q/ D.F. (Dissipation Factor)	** Test condition: 0.5±0.2Vrms, 1KHz±10%		=5.576	≦10%	0402≧0.10μF;0603≧0.47μF; 0805≧2.2μF; 1206≧6.8μF; 1210≧22μF; TT series
	. 200.,	X7R: 0603≥225(10V), 0805=106(6.3V&10V) X5R: 01R5≥103, 0201≥224 (6.3V),			≦5%	0201≥0.01µF; 0402≥0.033µF; 0805≥0.68µF;1206≥2.2µF; 1210≥4.7µF
		0402≧475 (6.3V), 0402≧225(10V), 0603=106 (6.3V) TT18X≧475(10V) , TT15X series	16V	≦3.5%	≦10%	0402≥0.47μF; 0603≥0.68μF; 0805≥2.2μF; 1206≥4.7μF; 1210≥22μF; TT series
		TT18X≧475(10V), TT15X series	10V	≦5%	≦10%	0402≥0.33μF; 0603≥0.33μF; 0805≥2.2μF; 1206≥2.2μF; 1210≥22μF; TT series
					≦15%	0201≧0.1µF; 0402≧1µF
			6.3V	≦10%	≦15%	0201≧0.1μF; 0402≧1μF; 0603≧10μF; 0805≧4.7μF; 1206≧47μF; 1210≧100μF
					≦20%	0402≧2.2µF
			4V	≦15%	-	-

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Item	Test Condition	Requirements								
		Y5V:								
		Rated Vol.	D.F.≦		Exception	of D.F. ≦				
		≧50V	5%	7%	0603≧0.1µ 1206≧4.7µ	ıF; 0805≧0.47μF; ιF				
		35V	7%	-	-					
		25\/	5%	7%		ł7μF; ιF; 0805≧0.33μF; ; 1210≧4.7μF				
		237	370	9%	0402≧0.06 0603≧0.47 1210≧22µ	′μF; 1206≧4.7μF;				
		16V	7%	9%	0402≧0.06 0603≧0.68					
		(C<1.0μ1)		12.5%	0402≧0.22	lμF				
		16V (C≧1.0μF)	9%	12.5%		ıF; 0805≧3.3μF; F; 1210≧22μF; F				
			12.5%	20%	0402≧0.47	μF				
		6.3V	20%	-	-					
Dielectric Strength	To apply voltage (≤100V) 250%. Duration: 1 to 5 sec. Charge and discharge current less than 50mA.	No evidence	of damaç	ge or flas	h over durin	g test.				
		10G or RxC≧500-F whichever is smaller Class II (X7R, X5R, Y5V))								
			Rated v	oltage		Insulation Resistance				
		100V: X7R								
	T	50V:0603≥1µ 1210≥4.7µF	F;0805≥1 <sub>I</sub>	uF;1206≥₄	4.7μF;					
		l <del> </del>	10G or							
		11			≥2.2µF;	RxC≧100ΩF				
		16V:0402≥0.2	22µF;0603	≥1µF;080	5≥2.2μF;	whichever is smaller.				
		10V:0201≥47								
	6.3V ; 4V		,							
		Dielectric Strength  To apply voltage (≤100V) 250%.  Duration: 1 to 5 sec.  Charge and discharge current less than 50mA.  Insulation  To apply rated voltage for max. 120	Y5V:   Rated Vol.   ≥50V   35V     25V	Py5V:   Rated Vol.   D.F.≦   ≥50V   5%   35V   7%   25V   5%   25V   5%   25V   25%	V5V:   Rated Vol.   D.F.≦	No evidence of damage or flash over during transport flash and some.   No evidence of damage or flash over during transport flash flash and some.				







No	Item	Test Condition	Requirements
6	Temperature Coefficient Adhesive	With no electrical load.  T.C. Operating Temp  NPO -55~125°C at 25°C  X7R -55~125°C at 25°C  X5R -55~85°C at 25°C  Y5V -25~85°C at 20°C  Pressurizing force:	T.C. Capacitance Change  NPO Within ±30ppm/°C  X7R Within ±15%  X5R Within ±15%  Y5V Within +30%/-80%
7	Strength of Termination	5N (≤0603) and 10N (>0603) Test time: 10±1 sec.	No remarkable damage or removal of the terminations.
8	Vibration Resistance	Vibration frequency: 10~55 Hz/min. Total amplitude: 1.5mm Test time: 6 hrs. (Two hrs each in the mutually perpendicular directions.) Measurement to be made after keep at room temp. for 24±2 hrs.	Cap change and Q/D.F.: To meet initial spec.
9	Solderability	Solder temperature : 235 ±5°C Dipping time : 2 ±0.5 sec.	95% min. coverage of all metalized area.
10	Bending Test	The middle part of substrate shall be pressurized by means of the pressurizing rod at a rate of about 1 mm per second until the deflection becomes 1mm and then the pressure shall be maintained for 5 ±1 sec.  Measurement to be made after keep at room temp. for 24 ±2 hrs.	NP0: within ±5% or 0.5pF whichever is larger X7R, X5R: within ±12.5% Y5V: within ±30% (This capacitance change means the change of capaci-
11	Resistance to Soldering Heat	Solder temperature: 260 ±5°C Dipping time: 10 ±1sec Preheating: 120 to 150°C for 1 minu before immerse the capacitor in a eutectic solder. Before initial measurement (Class II only): Perform 150+0/-10°C for 1 hr then set for 24 ±2hrs at room temp. Measurement to be made after keep at room temp. for 24±2 hrs.	NP0: within ±2.5% or 0.25pF whichever is larger X7R, X5R: within ±7.5% Y5V: within ±20% Q/D.F., I.R. and dielectric strength: To meet initial requirements
		Conduct the five cycles according to the temperatures and time.	
12	Temperature Cycle	Step Temp. (°C) Ti (mm 1 Min. operating temp. +0/-3 30 2 Room temp. 2 3 Max. operating temp. +3/-0 30 4 Room temp. 2 2 Before initial measurement (Class II only Perform 150 +0/-10°C for 1 hour and the set for 24 ±2hrs at room temp. Measurement to be made after keeping a room temp. for 24±2 hrs.	No remarkable damage. Cap change: NP0: within ±2.5% or 0.25pF whichever is larger X7R, X5R: within ±7.5% Y5V: within ±20% Q/D.F., I.R. and dielectric strength: To meet initial requirements.





		X7R, X5R Y5V: ≥10\	ge: NF : ≥10 /, with ue: NF 00+10	P0 : w V**,w in ±3 P0: M DC	vithin vithin 0%; 6	±12.5	5%;6.3\ within -	oF whichever is larger V within ±25%; +30/-40% ≥350, 10pF≤C≤30pF, Q≥275+2.5C. Less than  Exception of D.F. ≦				
		vol. ≧50V		.≦				Exception of D.F. ≦				
			≦2.5		vol. D.F.≦ Exception of D.F. ≦							
			≦2.5		<b>≦</b> 39	% (	0201(50	0V); 0603≧0.047μF; 0805≧0.18μF;1206≧0.47μF				
		35V		5%	≦5°	%	1210≧4	l.7μF				
		35V		Ī	≦10	% (	0603≧1	μF; 0805≧1μF;1206≧4.7μF; 1210≧10μF				
			≦3.5	5%	≦10	% (	0805≥2.	.2μF; 1210≧10μF				
		1 1			≦5°	% (	0201≧0	0.01μF;0805≧1μF; 1210≧10μF				
		25V	≦3.5	5%	≦7°	% (	0603≧0	).33μF; 1206≧4.7μF				
		- 40	250	=0.0	7.0	≦10		0402≧0 1210≧2	0.10μF;0603≧0.47μF; 0805≧2.2μF; 1206≧6.8μF ; 22μF			
		16V	≦3.5	=0/	≦5°		0201≧0 ;1210≧	0.01μF; 0402≧0.033μF; 0805≧0.68μF;1206≧2.2μF 4.7μF				
		160	≅3.0	J 70	≦10			0.47μF; 0603≧0.68μF;0805≧2.2μF; 1206≧4.7μF; 22μF; TT series				
		10V	≦5°	%	≦10			0.33μF; 0603≧0.33μF; 0805≧2.2μF; 1206≧2.2μF; 22μF; TT series				
eady State		±2 hrs at room temp. Measurement to be made	±2 hrs at room temp.  Measurement to be made	±2 hrs at room temp.  Measurement to be made				≦15	% (	0201≧0	).1μF; 0402≧1μF	
					Measurement to be made	Measurement to be made	Measurement to be made	Measurement to be made	Measurement to be made	6.3V	≦10	)%
	keeping at room temp. for				≦20	% (	0402≧2	2.2µF				
	24 ±2 hrs.	4V	≦15	5%	-	-	-					
		Y5V:										
		Rated vol.		D.F.	.≦			Exception of D.F. ≦				
		-			-+	7%	06	603≧0.1μF; 0805≧0.47μF; 1206≧4.7μF				
		35V		7%	6			.02≥0.047µF; 0603≥0.1µF; 0805≥0.33µF; .06≥1µF; 1210≥4.7µF				
		25V		5%	6   	9%	04	.02≥0.068μF; 0603≥0.47μF; 1206≥4.7μF; :10≥22μF				
		16V			, 1	9%	04	.02≧0.068µF; 0603≧0.68µF				
			F)	7%	°	12.5°	% 04	.02≧0.22µF				
		16V (C≧1.0µ	ıF)	9%	6	12.5		:03≧2.2μF; 0805≧3.3μF; 1206≧10μF; :10≧22μF; 1812≧47μF				
		(C≦1.0μF)	12.5	5%	20%	6 04	.02≧0.47μF					
		6.3V		209	%	-	-					
			vol.  ≥50V  35V  25V  16V (C<1.0µ  16V (C≥1.0µ  10V	≥50V 35V 25V 16V (C<1.0μF) 16V (C≥1.0μF)	vol.       D.F         ≥50V       59         35V       79         25V       59         16V (C<1.0μF)	vol.       D.F.≦         ≥50V       5%         35V       7%         25V       5%         16V (C<1.0μF)	vol.     D.F.≦ $\geq 50V$ 5%     7%       35V     7%     -       25V     5%     9%       16V (C<1.0µF)	vol.     D.F.≦       ≥50V     5%     7%     06       35V     7%     -     -       25V     5%     7%     04       16V     9%     04       16V     7%     9%     04       16V     7%     12.5%     06       16V     9%     12.5%     06       12     10V     12.5%     20%     04				







No	Item	Test Condition	Requirements								
			*I.R.: ≥10	0V, 1GΩ (	or 50Ω-F	whichever is smaller.					
			Class II	(X7R, X5I	R, Y5V)						
					Rated vo	ltage	Insulation Resistance				
			100V: X	7R							
			50V:060	3≥1µF;080	)5≥1µF;1;	206≥4.7μF; 1210≥4.7μF					
13	Humidity (Damp Heat)		35V:080	5≥2.2μF;1	210≧10µ	F					
.0	Steady State		11	2≥1μF;060 )μF;1210≥		0805≥2.2μF;	1GΩ or RxC≧ 10Ω-F				
			11	2≥0.22μF; 0μF;1210≥		F;0805≥2.2μF;	whichever is smaller.				
			10V:020	•	102≥0.47µ	uF;0603≥0.47μF; 210≥47μF	is silialici.				
			6.3V ; 4V			- 10 11 pr					
				lue: NP0: 0		/, within +30/-40% ⊵200;C<30pF, Q≥100+10 Exception o					
		Test temp.: 40±2°C Humidity: 90~95%RH	≦3% 0201(50V); 0603≧0.047µF; 08				; 0805≧0.18µF;1206≧0.47µF				
			≧50V	≦2.5%	≦5%	1210≧4.7µF					
		Test time: 500+24/-0 hrs.			≦10%	0603≧1μF; 0805≧1μF;120	06≧4.7μF; 1210≧	10μF			
		To apply voltage : rated voltage.	35V	≦3.5%	≦10%	0805≥2.2μF; 1210≧10μF					
	Humidity	Before initial measure-			≦5%	0201≧0.01µF;0805≧1µF;	· · · · · · · · · · · · · · · · · · ·				
14	(Damp Heat) Load	ment (Class II only): To apply test voltage for 1hr	25V	≦3.5%	≦7%	0603≥0.33μF; 1206≥4.7μ		000>00 5			
	Load	at 40°C and then set for			≦10%	0402≧0.10μF;0603≧0.47μ 1210≧22μF	IF; 0805≦2.2μF; 1	206≦6.8μF ;			
		24±2 hrs at room temp. Measurement to be made	16V	≤3.5%	≦5%	0201≧0.01µF; 0402≧0.03 ;1210≧4.7µF	3μF; 0805≧0.68μl	F;1206≧2.2μF			
		after keeping at room temp. for 24±2 hrs.	100	≅3.376	≦10%	0402≧0.47μF; 0603≧0.68 1210≧22μF; TT series	μF;0805≧2.2μF; 1	206≧4.7μF;			
			10V	≦5%	≦10%	0402≧0.33μF; 0603≧0.33 1210≧22μF; TT series	33μF; 0805≧2.2μF; 1206≧2.2μF;				
					≦15%	0201≧0.1μF; 0402≧1μF					
			6.3V	≦10%	≦15%	5% 0201≥0.1μF; 0402≥1μF; 0603≥10μF; 0805≥4.7μF; 1206≥47μF; 1210≥100μF					
					≦20%	· ·					
			4V	≦15%	-	-					







No	Item	Test Condition			I	Requirements		
			Y5V:					
			Rated vol.	D.F.≦		Exception	n of D.F. ≦	
			≧50V	5%	7%	0603≧0.1µF; 0805≧0	0.47μF; 1206≧4.7μF	
			35V	7%	-	-		
			25V	5%	7%	0402≧0.047µF; 0603 1206≧1µF; 1210≧4.7	i≧0.1μF; 0805≧0.33μF; 7μF	
			237	376	9%	0402≧0.068μF; 0603 1210≧22μF	i≧0.47μF; 1206≧4.7μF;	
			16V	7%	9%	0402≧0.068µF; 0603	s≧0.68μF	
			(C<1.0µF)	1 70	12.5%	0402≧0.22µF		
			16V (C≧1.0µF)	9%	12.5%	0603≧2.2μF; 0805≧3 1210≧22μF; 1812≧4		
			10V	12.5%	20%	0402≧0.47µF		
	Humidity		6.3V	20%	-	-		
14	(Damp Heat)		I.R.: ≥10V, 50	0MΩ or 2	25Ω-F w	hichever is smalle	r.	
	Load		Class II (X7R	, X5R, Y	5V)			
				Rate	d voltage	)	Insulation Resistance	
			100V: X7R					
			50V:0603≥1µl	F;0805≥1µ				
			35V:0805≥2.2	µF;1210≧				
			25V:0402≥1µl	F;0603≥2.	500MΩ or			
			1206≥10µF;1	210≥10µF	RxC≧ 5Ω-F			
			16V:0402≥0.2 1206≥10µF;1		whichever is smaller.			
			10V:0201≥47i 0805≥2.2µF;					
			6.3V ; 4V	•	•			
15	High Temperature Load (Endurance)	Test temp.: NP0, X7R: 125 ±3°C X5R Y5V: 85 ±3°C Test time: 1000+24/-0 hrs. To apply voltage (1) 6.3V or C≥10µF or TT series: 150% of rated voltage. (2) 10V ≤ Ur<500V: 200% of rated voltage. (3) 500V: 150% of rated voltage. (4) Ur≥630V: 120% of rated voltage.	X7R, X5R : ≥ Y5V: ≥10V, w	NP0 : ±3 10V**,wit ithin ±30 NP0: Mc	.0% or ± thin ±12. %; 6.3V, ore than	0.3pF whichever i 5%;6.3V within ±2 within +30/-40% 30pF, Q≥350; 10pl		5C;







No	Item		Test C	Condition					Re	quirements
						X7R, X5	R:			
						Rated vol.	D.I	F.≦		Exception of D.F. ≦
								1		201(50V); 0603≧0.047μF; 805≧0.18μF;1206≧0.47μF
						≥50V	≦3	3% ≦	<u>≤</u> 10% 1	210≧4.7µF
								<b>=</b>	- 7/110/2	603≧1μF; 0805≧1μF;1206≧4.7μF; 210≧10μF
		(5) 100 ran	)% of rated	voltage fo	r below	35V	≦!	5% ≦	≦20% C	805≥2.2µF; 1210≧10µF
			J.		Capaci-			≦	≦10% C	201≧0.01μF;0805≧1μF; 1210≧10μF
		Size	Dielectric	Rated voltage	tance			<b>=</b>	≦14% C	603≧0.33µF; 1206≧4.7µF
		0201	X5R/X7R	6.3V,10V	range C≧0.1µF	25V	≦!	5% ≦	-15% 1	402≧0.10µF;0603≧0.47µF;
		0402	X5R/X7R	6.3V,10V	C≧1.0µF					805≧2.2μF;1206≧6.8μF; 1210≧22μF
		0603	X5R/X7R	6.3V,10V	C≧4.7µF			≦		603≧0.15µF;0805≧0.68µF;
		0805	X5R/X7R	6.3V	C≧22µF	   16V		5% <del> </del>	<del></del>	206≥2.2μF;1210≥4.7μF 201≥0.01μF;0402≥0.033μF;
		1206	X5R/X7R	6.3V	C≧47µF				≦15% C	603≧0.68µF;0805≧2.2µF;
		1200	NP0	3000V	C≧1.5pF			$\perp$		206≧4.7μF; 1210≧22μF
	High	(6) 150% of rated voltage for below range.				10V	≦7	5% ≦	≦15% C	1201≧0.012μF;0402≧0.33μF; 1603≧0.33μF; 0805≧2.2μF; 206≧2.2μF; 1210≧22μF
15	Temperature	LI SIZE I DIELECTRIC I		Rated	Capaci- tance			<u></u>	<del></del>	201≧0.1μF; 0402≧1μF
15	Load (Endurance)	Size	X5R/X7R	voltage 10V,16V,	range C≧0.22µF	6.3V	≦1	5% ≦	≦30% C	201≥0.1μF; 0402≥1μF; 0603≥10μF; 1805≥4.7μF; 1206≥47μF;
		0402		25V		4V	-2	0%	1	210≧100µF
			Y5V X5R/X7R	16V 10V,16V	C≧0.47µF		<u> </u> ≥∠	.0%	-  -	
		0603	Y5V	16V	C≧1µF C≧2.2µF	Y5V:			1	
			X5R/X7R	10V	C≧4.7μF	Rate vol.		D.F.≦		Exception of D.F. ≦
		1206	Y5V	16V	C≧4.7pF	≧50′	V	5%	7%	0603≧0.1μF; 0805≧0.47μF; 1206≧4.7μF
			initial mea To apply tes			35V	,	7%	<del> </del> -	i-
			mp. and the		24 ±2 hrs at	25V	,	5%	7%	0402≧0.047µF; 0603≧0.1µF; 0805≧0.33µF; 1206≧1µF; 1210≧4.7µF
			rement to b						9%	0402≧0.068μF; 0603≧0.47μF; 1206≧4.7μF; 1210≧22μF
						16V	,	7%	9%	0402≧0.068µF; 0603≧0.68µF
						(C<1.0	μF)	7 %	12.5%	6 0402≧0.22μF
						16V (C≧1.0		9%	12.5%	0603≧2.2μF; 0805≧3.3μF; 1206≧10μF; 1210≧22μF; 1812≧47μF
						10V		12.5%	20%	0402≧0.47µF
						6.3\	/	20%	-	-

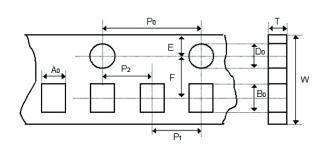




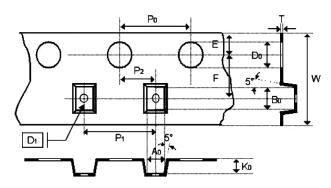
No	Item	Test Condition	Requirements	
			I.R.: ≥10V, 1GΩ or 50Ω -F whichever is smaller Class II (X7R, X5R, Y5V)	
			Rated voltage	Insulation Resistance
	High Temperature Load (Endurance)	100V: X7R		
			50V:0603≥1μF;0805≥1μF;1206≥4.7μF; 1210≥4.7μF	
,_			35V:0805≥2.2μF;1210≧10μF	
15		Load (Endurance) 25V:0402≥1μF;0603≥2.2 1206≥10μF;1210≥10μF	25V:0402≥1µF;0603≥2.2µF;0805≥2.2µF; 1206≥10µF;1210≥10µF	1GΩ or RxC≧ 10ΩF
			16V:0402≥0.22µF;0603≥1µF;0805≥2.2µF; 1206≥10µF;1210≥47µF	whichever is smaller.
			10V:0201≥47nF;0402≥0.47µF;0603≥0.47µF; 0805≥2.2µF; 1206≥4.7µF;1210≥47µF	
			6.3V ; 4V	

#### **Appendixes**

**Tape & Reel Dimensions** 



The dimension of paper tape

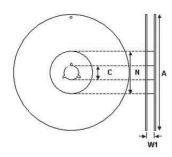


The dimension of plastic tape

Size	0402	0603		0805			1206		12	10	1812
Thickness	N	S, X	Α	В	C, D, I	В	C, J, D	G	C, D, G	М	D, K
A <sub>0</sub>	0.62±0.05	1.02 ±0.05	1.5 ±0.10	1.5 ±0.1	<1.57	2 ±0.1	<1.85	<1.95	<2.97	<2.97	<3.81
B <sub>0</sub>	1.12±0.05	1.80 ±0.05	2.3 ±0.10	2.3 ±0.1	<2.40	3.5 ±0.1	<3.46	<3.67	<3.73	<3.73	<5.30
Т	0.60±0.05	0.95 ±0.05	0.75 ±0.05	0.95 ±0.05	0.23 ±0.05	0.95 ±0.05	0.23±0.05	0.23 ±0.05	0.23 ±0.05	0.23 ±0.05	0.25 ±0.05
K <sub>0</sub>	-	-	-	-	<2.50	-	<2.5	<2.5	<2.5	<3	<2.50
W	8 ±0.1	8 ±0.1	8 ±0.1	8 ±0.10	8 ±0.1	8 ±0.1	8 ±0.1	8 ±0.1	8 ±0.1	8 ±0.1	12 ±0.2
P <sub>0</sub>	4 ±0.1	4 ±0.1	4 ±0.1	4 ±0.10	4 ±0.1	4 ±0.1	4 ±0.1	4 ±0.1	4 ±0.1	4 ±0.1	4 ±0.1
10xP0	40 ±0.1	40 ±0.1	40 ±0.1	40 ±0.10	40 ±0.1	40 ±0.1	40 ±0.1	40 ±0.1	40 ±0.1	40 ±0.1	40 ±0.1
P1	2 ±0.05	4 ±0.1	4 ±0.1	4 ±0.10	4 ±0.1	4 ±0.1	4 ±0.1	4 ±0.1	4 ±0.1	4 ±0.1	8 ±0.1
P2	2 ±0.05	2 ±0.05	2 ±0.05	2 ±0.05	2 ±0.05	2 ±0.05	2 ±0.05	2 ±0.05	2 ±0.05	2 ±0.05	2 ±0.05
D <sub>0</sub>	1.55±0.05	1.55 ±0.05	1.55 ±0.05	1.55±0.05	1.5 ±0.05	1.5 ±0.05	1.5 ±0.05	1.5 ±0.05	1.5 ±0.05	1.5 ±0.05	1.5 ±0.05
D1	-	-	-	-	1 ±0.1	-	1 ±0.1	1 ±0.1	1 ±0.1	1 ±0.1	1.5 ±0.1
E	1.75±0.05	1.75 ±0.05	1.75 ±0.05	1.75 ±0.05	1.75 ±0.1	1.75 ±0.1	1.75 ±0.1	1.75 ±0.1	1.75 ±0.1	1.75 ±0.1	1.75 ±0.1
F	3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	5.5 ±0.05



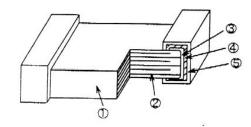




The dimension of reel

Size	0402, 0603, 0805, 1206, 1210			1812
Reel size	7"	10"	13"	7"
С	13 +0.5/-0.2	13 +0.5/-0.2	13 +0.5/-0.2	13 +0.5/-0.2
W <sub>1</sub>	8.4 +1.5/-0	8.4 +1.5/-0	8.4 +1.5/-0	12.4 +2.0/-0
А	178 ±0.10	250 ±1	330 ±1	178 ±0.10
N	60 +1/-0	100 ±1	100 ±1	60 +1.0/-0

#### **Constructions:**



No.	Na	me	NP0*	NP0
1	Ceramic	material	BaTiO <sub>3</sub>	based
2	Inner electrode		AgPd alloy	Ni
3		Inner layer	Ag	Cu
4	Termination	Middle layer	١	li
5		Outer layer	S	n

<sup>\*</sup> Partial NPO items are with Ag/Ni/Sn terminations, please ref to product range of NPO dielectric for detail.

#### Storage and handling conditions

- (1) To store products at 5°C 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:

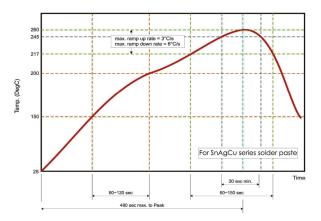
- a. The corrosive gas reacts on the terminal electrodes of capacitors, and results in the poor solderability.
   Do not store the capacitors in the ambience of corrosive gas (e.g., hydrogen sulfide, sulfur dioxide, chlorine, ammonia gas etc.)
- b. In corrosive atmosphere, solderability might be degraded, and silver migration might occur to cause low reliability.
- c. Due to the dewing by rapid humidity change, or the photochemical change of the terminal electrode by direct sunlight, the solderability and electrical performance may deteriorate. Do not store capacitors under direct sunlight or dewing condition. To store products on the shelf and avoid exposure to moisture.



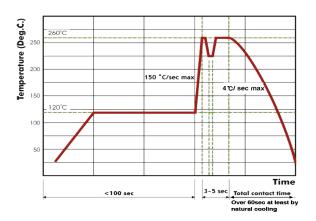


### **Recommended Soldering Conditions:**

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  $N_2$  within oven are recommended.



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



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

#### **Part Number Table**

Description	Part Number
MLCC, 0603, NP0, 50V, 82pF	MCCA000203
MLCC, 0603, NP0, 50V, 220pF	MCCA000209
MLCC, 0603, X7R, 50V, 560pF	MCCA000218
MLCC, 0603, X7R, 50V, 3.3nF	MCCA000231
MLCC, 0603, X7R, 50V, 47nF	MCCA000249
CAP, Ceramic, 0.1µF, 50V, X7R, 0603	MCCA000255
CAP, Ceramic, 0.1µF, 50V, Y5V, 0603	MCCA000256
CAP, Ceramic, 0.1µF, 16V, X7R, 0805	MCCA000274
CAP, Ceramic, 0.1µF, 25V, X7R, 0805	MCCA000295
CAP, Ceramic, 0.1µF, 25V, Y5V, 0805	MCCA000296
MLCC, 0805, Y5V, 25V, 330nF	MCCA000303
CAP, Ceramic, 10pF, 50V, C0G/NP0, 0805	MCCA000318
CAP, Ceramic, 12pF, 50V, C0G/NP0, 0805	MCCA000319
CAP, Ceramic, 15pF, 50V, C0G/NP0, 0805	MCCA000320
CAP, Ceramic, 18pF, 50V, C0G/NP0, 0805	MCCA000321
CAP, Ceramic, 22pF, 50V, C0G/NP0, 0805	MCCA000322
CAP, Ceramic, 33pF, 50V, C0G/NP0, 0805	MCCA000324
MLCC, 0805, NP0, 50V, 56pF	MCCA000327
CAP, Ceramic, 100pF, 50V, C0G/NP0, 0805	MCCA000330

Description	Part Number
CAP, Ceramic, 470pF, 50V, X7R, 0805	MCCA000342
CAP, Ceramic, 1000pF, 50V, X7R, 0805	MCCA000350
MLCC, 0603, X7R, 50V, 100nF	MCCA000255
CAP, Ceramic, 10µF, 16V, Y5V, 1206	MCCA000564
MLCC, 1206, X7R, 25V, 1µF	MCCA000565
CAP, Ceramic, 10µF, 25V, Y5V, 1206	MCCA000570
CAP, Ceramic, 1µF, 50V, X7R, 1206	MCCA000571
CAP, Ceramic, 100µF, 6.3V, X5R, 1210	MCCA000574
CAP, Ceramic, 4700pF, 50V, X7R, 0805	MCCA000364
MLCC, 0805, X7R, 50V, 8.2nF	MCCA000367
CAP, Ceramic, 0.01µF, 50V, X7R, 0805	MCCA000368
CAP, Ceramic, 0.01µF, 50V, Y5V, 0805	MCCA000369
CAP, Ceramic, 0.022µF, 50V, X7R, 0805	MCCA000374
CAP, Ceramic, 0.1µF, 50V, X7R, 0805	MCCA000386
MLCC, 0805, Y5V, 50V, 220nF	MCCA000389
CAP, Ceramic, 0.1µF, 16V, X7R, 1206	MCCA000416
CAP, Ceramic, 0.1µF, 25V, X7R, 1206	MCCA000434
CAP, Ceramic, 1000pF, 50V, X7R, 1206	MCCA000457
CAP, Ceramic, 0.01µF, 50V, X7R, 1206	MCCA000469





Description	Part Number
CAP, Ceramic, 0.1µF, 50V, X7R, 1206	MCCA000478
CAP, Ceramic, 0.22µF, 50V, X7R, 1206	MCCA000479
CAP, Ceramic, 0.1µF, 100V, X7R, 1206	MCCA000490
CAP, Ceramic, 1µF, 6.3V, X5R, 0402	MCCA000500
MLCC, 0402, X5R, 10V, 0.1µF	MCCA000505
CAP, Ceramic, 0.1µF, 16V, X5R, 0402	MCCA000512
CAP, Ceramic, 10µF, 6.3V, X5R, 0603	MCCA000517
CAP, Ceramic, 1µF, 10V, X5R, 0603	MCCA000522
MLCC, 0603, Y5V, 10V, 2.2µF	MCCA000523
CAP, Ceramic, 1µF, 16V, X5R, 0603	MCCA000529
CAP, Ceramic, 1µF, 16V, Y5V, 0603	MCCA000530
CAP, Ceramic, 1µF, 25V, X5R, 0603	MCCA000531
CAP, Ceramic, 22µF, 6.3V, X5R, 0805	MCCA000536
CAP, Ceramic, 10µF, 10V, Y5V, 0805	MCCA000542
CAP, Ceramic, 1µF, 16V, Y5V, 0805	MCCA000543
CAP, Ceramic, 4.7µF, 16V, Y5V, 0805	MCCA000547
MLCC, 0805, X5R, 16V, 4.7µF	MCCA000548
CAP, Ceramic, 1µF, 25V, Y5V, 0805	MCCA000549
CAP, Ceramic, 4.7µF, 25V, X5R, 0805	MCCA000551
CAP, Ceramic, 1µF, 50V, Y5V, 0805	MCCA000552
CAP, Ceramic, 10µF, 10V, Y5V, 1206	MCCA000554
CAP, Ceramic, 22µF, 10V, Y5V, 1206	MCCA000555
MLCC, 1206, X7R, 16V, 1µF	MCCA000556
CAP, Ceramic, 0.22µF, 25V, X7R, 0603	MCCA001172
CAP, Ceramic, 10µF, 6.3V, X5R, 0805	MCCA000593
MLCC, 0805, X5R, 16V, 1µF	MCCA000596
Capacitor, 0805, NP0, 500V, 22pF	MCCA000664
CAP, MLCC, 150pF, 50V, NP0, 0402, Reel	MC000375
Capacitor, 0805, NP0, 500V, 33pF	MCCA000665
Capacitor, 0805, NP0, 500V, 47pF	MCCA000666
Capacitor, 0805, NP0, 500V, 68pF	MCCA000667
Capacitor, 0805, NP0, 500V, 100pF	MCCA000668
Capacitor, 0805, NP0, 500V, 150pF	MCCA000669
Capacitor, 0805, NP0, 500V, 220pF	MCCA000670
Capacitor, 0805, NP0, 500V, 330pF	MCCA000671
Capacitor, 0805, X7R, 200V, 100pF	MCCA000672
Capacitor, 0805, X7R, 200V, 150pF	MCCA000673
Capacitor, 0805, X7R, 200V, 15nF	MCCA000674
Capacitor, 0805, X7R, 200V, 22nF	MCCA000675
Capacitor, 1206, NP0, 200V, 1.5pF	MCCA000676
Capacitor, 1206, NP0, 200V, 2.2pF	MCCA000677
Capacitor, 1206, NP0, 200V, 3.3pF	MCCA000678

Description	Part Number
Capacitor, 1206, NP0, 200V, 4.7pF	MCCA000679
Capacitor, 1206, NP0, 200V, 6.8pF	MCCA000680
Capacitor, 1206, NP0, 200V, 10pF	MCCA000681
Capacitor, 1206, NP0, 200V, 15pF	MCCA000682
Capacitor, 1206, NP0, 200V, 22pF	MCCA000683
Capacitor, 1206, NP0, 200V, 33pF	MCCA000684
Capacitor, 1206, NP0, 200V, 47pF	MCCA000685
Capacitor, 1206, NP0, 200V, 68pF	MCCA000686
Capacitor, 1206, NP0, 200V, 100pF	MCCA000687
Capacitor, 1206, NP0, 200V, 150pF	MCCA000688
Capacitor, 1206, NP0, 200V, 220pF	MCCA000689
Capacitor, 1206, NP0, 200V, 330pF	MCCA000690
Capacitor, 1206, NP0, 200V, 470pF	MCCA000691
Capacitor, 1206, NP0, 200V, 680pF	MCCA000692
Capacitor, 1206, NP0, 200V, 1.5nF	MCCA000693
Capacitor, 1206, NP0, 200V, 2.2nF	MCCA000694
Capacitor, 1206, NP0, 630V, 1.5pF	MCCA000695
Capacitor, 1206, NP0, 630V, 2.2pF	MCCA000696
Capacitor, 1206, NP0, 630V, 3.3pF	MCCA000697
MLCC, 0603, Y5V, 16V, 330nF	MCCA000163
CAP, MLCC, 270pF, 50V, NP0, 0603, Reel	MC000460
MLCC, 0603, Y5V, 16V, 470nF	MCCA000164
CAP, Ceramic, 0.01µF, 25V, X7R, 0603	MCCA000165
MLCC, 0603, Y5V, 16V, 470nF	MCCA000164
MLCC, 0603, X7R, 25V, 12nF	MCCA000166
MLCC, 0603, X7R, 25V, 15nF	MCCA000167
MLCC, 0603, X7R, 25V, 18nF	MCCA000168
MLCC, 0603, X7R, 25V, 10nF	MCCA000165
MLCC, 0603, X7R, 25V, 12nF	MCCA000166
MLCC, 0603, X7R, 25V, 15nF	MCCA000167
MLCC, 0603, X7R, 25V, 18nF	MCCA000168
MLCC, 0603, X7R, 25V, 22nF	MCCA000169
MLCC, 0603, X7R, 25V, 27nF	MCCA000170
MLCC, 0603, X7R, 25V, 33nF	MCCA000171
MLCC, 0603, X7R, 25V, 39nF	MCCA000172
MLCC, 0603, X7R, 25V, 47nF	MCCA000173
MLCC, 0603, X7R, 25V, 56nF	MCCA000174
MLCC, 0603, X7R, 25V, 68nF	MCCA000175
MLCC, 0603, X7R, 25V, 22nF	MCCA000169
MLCC, 0603, X7R, 25V, 27nF	MCCA000170
MLCC, 0603, X7R, 25V, 33nF	MCCA000171
MLCC, 0603, X7R, 25V, 39nF	MCCA000172





Description	Part Number
MLCC, 0603, X7R, 25V, 47nF	MCCA000173
MLCC, 0603, X7R, 25V, 56nF	MCCA000174
MLCC, 0603, Y5V, 25V, 68nF	MCCA000176
MLCC, 0603, X7R, 25V, 82nF	MCCA000177
CAP, Ceramic, 0.1µF, 25V, X7R, 0603	MCCA000178
CAP, Ceramic, 0.1µF, 25V, Y5V, 0603	MCCA000179
MLCC, 0603, Y5V, 25V, 1µF	MCCA000180
MLCC, 0603, NP0, 50V, 0.5pF	MCCA000181
MLCC, 0603, NP0, 50V, 1pF	MCCA000182
MLCC, 0603, NP0, 50V, 1.5pF	MCCA000183
MLCC, 0603, NP0, 50V, 2pF	MCCA000184
MLCC, 0603, NP0, 50V, 3pF	MCCA000185
Capacitor, 1206, NP0, 630V, 4.7pF	MCCA000698
Capacitor, 1206, NP0, 630V, 6.8pF	MCCA000699
Capacitor, 1206, NP0, 630V, 10pF	MCCA000700
Capacitor, 1206, NP0, 630V, 15pF	MCCA000701
Capacitor, 1206, NP0, 630V, 22pF	MCCA000702
Capacitor, 1206, NP0, 630V, 33pF	MCCA000703
Capacitor, 1206, NP0, 630V, 47pF	MCCA000704
Capacitor, 1206, NP0, 630V, 68pF	MCCA000705
Capacitor, 1206, NP0, 630V, 150pF	MCCA000706
Capacitor, 1206, NP0, 630V, 220pF	MCCA000707
Capacitor, 1206, NP0, 630V, 330pF	MCCA000708
Capacitor, 1206, NP0, 630V, 470pF	MCCA000709
Capacitor, 1206, NP0, 630V, 680pF	MCCA000710
Capacitor, 1206, NP0, 630V, 1nF	MCCA000711
Capacitor, 1206, NP0, 1000V, 1.5pF	MCCA000712
Capacitor, 1206, NP0, 1000V, 2.2pF	MCCA000713
Capacitor, 1206, NP0, 1000V, 3.3pF	MCCA000714
Capacitor, 1206, NP0, 1000V, 4.7pF	MCCA000715
Capacitor, 1206, NP0, 1000V, 6.8pF	MCCA000716
Capacitor, 1206, NP0, 1000V, 10pF	MCCA000717
Capacitor, 1206, NP0, 1000V, 15pF	MCCA000718
Capacitor, 1206, NP0, 1000V, 22pF	MCCA000719
Capacitor, 1206, NP0, 1000V, 33pF	MCCA000720
Capacitor, 1206, NP0, 1000V, 47pF	MCCA000721
Capacitor, 1206, NP0, 1000V, 68pF	MCCA000722
Capacitor, 1206, NP0, 1000V, 100pF	MCCA000723
Capacitor, 1206, NP0, 1000V, 150pF	MCCA000724
Capacitor, 1206, NP0, 1000V, 220pF	MCCA000725
Capacitor, 1206, NP0, 1000V, 330pF	MCCA000726
Capacitor, 1206, NP0, 1000V, 470pF	MCCA000727

Description	Part Number
Capacitor, 1206, NP0, 2000V, 1.5pF	MCCA000728
Capacitor, 1206, NP0, 2000V, 2.2pF	MCCA000729
Capacitor, 1206, NP0, 2000V, 3.3pF	MCCA000730
Capacitor, 1206, NP0, 2000V, 4.7pF	MCCA000731
Capacitor, 1206, NP0, 2000V, 6.8pF	MCCA000732
Capacitor, 1206, NP0, 2000V, 10pF	MCCA000733
MLCC, 0603, NP0, 50V, 4pF	MCCA000186
MLCC, 0603, X7R, 25V, 68nF	MCCA000175
MLCC, 0603, Y5V, 25V, 68nF	MCCA000176
MLCC, 0603, X7R, 25V, 82nF	MCCA000177
MLCC, 0603, X7R, 25V, 100nF	MCCA000178
MLCC, 0603, Y5V, 25V, 100nF	MCCA000179
MLCC, 0603, Y5V, 25V, 1µF	MCCA000180
MLCC, 0603, NP0, 50V, 0.5pF	MCCA000181
MLCC, 0603, NP0, 50V, 1pF	MCCA000182
MLCC, 0603, NP0, 50V, 1.5pF	MCCA000183
MLCC, 0603, NP0, 50V, 2pF	MCCA000184
MLCC, 0603, NP0, 50V, 3pF	MCCA000185
MLCC, 0603, NP0, 50V, 4pF	MCCA000186
MLCC, 0603, NP0, 50V, 5pF	MCCA000187
MLCC, 0603, NP0, 50V, 6pF	MCCA000188
MLCC, 0603, NP0, 50V, 7pF	MCCA000189
MLCC, 0603, NP0, 50V, 8pF	MCCA000190
MLCC, 0603, NP0, 50V, 9pF	MCCA000191
CAP, Ceramic, 10pF, 50V, C0G / NP0, 0603	MCCA000192
CAP, Ceramic, 12pF, 50V, C0G / NP0, 0603	MCCA000193
CAP, Ceramic, 15pF, 50V, C0G / NP0, 0603	MCCA000194
CAP, Ceramic, 18pF, 50V, C0G / NP0, 0603	MCCA000195
CAP, Ceramic, 22pF, 50V, C0G / NP0, 0603	MCCA000196
CAP, Ceramic, 27pF, 50V, C0G / NP0, 0603	MCCA000197
CAP, Ceramic, 33pF, 50V, C0G / NP0, 0603	MCCA000198
MLCC, 0603, NP0, 50V, 39pF	MCCA000199
CAP, Ceramic, 47pF, 50V, C0G / NP0, 0603	MCCA000200
MLCC, 0603, NP0, 50V, 56pF	MCCA000201
MLCC, 0603, NP0, 50V, 68pF	MCCA000202
CAP, Ceramic, 100pF, 50V, C0G/NP0, 0603	MCCA000204
MLCC, 0603, NP0, 50V, 120pF	MCCA000205
MLCC, 0603, NP0, 50V, 150pF	MCCA000206
MLCC, 0603, NP0, 50V, 180pF	MCCA000207
MLCC, 0603, NP0, 50V, 5pF	MCCA000187
MLCC, 0603, NP0, 50V, 6pF	MCCA000188
Capacitor, 1206, NP0, 2000V, 15pF	MCCA000734





Description	Part Number
Capacitor, 1206, NP0, 2000V, 22pF	MCCA000735
Capacitor, 1206, NP0, 2000V, 33pF	MCCA000736
Capacitor, 1206, NP0, 2000V, 47pF	MCCA000737
Capacitor, 1206, NP0, 2000V, 68pF	MCCA000738
Capacitor, 1206, NP0, 2000V, 100pF	MCCA000739
Capacitor, 1206, NP0, 2000V, 150pF	MCCA000740
Capacitor, 1206, NP0, 2000V, 220pF	MCCA000741
Capacitor, 1206, X7R, 200V, 150pF	MCCA000742
Capacitor, 1206, X7R, 200V, 220pF	MCCA000743
Capacitor, 1206, X7R, 200V, 330pF	MCCA000744
Capacitor, 1206, X7R, 200V, 470pF	MCCA000745
Capacitor, 1206, X7R, 200V, 680pF	MCCA000746
Capacitor, 1206, X7R, 200V, 1nF	MCCA000747
Capacitor, 1206, X7R, 200V, 1.5nF	MCCA000748
Capacitor, 1206, X7R, 200V, 2.2nF	MCCA000749
Capacitor, 1206, X7R, 200V, 3.3nF	MCCA000750
Capacitor, 1206, X7R, 200V, 4.7nF	MCCA000751
Capacitor, 1206, X7R, 200V, 6.8nF	MCCA000752
Capacitor, 1206, X7R, 200V, 10nF	MCCA000753
Capacitor, 1206, X7R, 200V, 33nF	MCCA000754
Capacitor, 1206, X7R, 200V, 47nF	MCCA000755
Capacitor, 1206, X7R, 200V, 68nF	MCCA000756
Capacitor, 1206, X7R, 200V, 100nF	MCCA000757
Capacitor, 1206, X7R, 630V, 150pF	MCCA000758
Capacitor, 1206, X7R, 630V, 220pF	MCCA000759
Capacitor, 1206, X7R, 630V, 330pF	MCCA000760
Capacitor, 1206, X7R, 630V, 470pF	MCCA000761
Capacitor, 1206, X7R, 630V, 680pF	MCCA000762
Capacitor, 1206, X7R, 630V, 1.5nF	MCCA000763
Capacitor, 1206, X7R, 630V, 3.3nF	MCCA000764
Capacitor, 1206, X7R, 630V, 6.8nF	MCCA000765
Capacitor, 1206, X7R, 630V, 15nF	MCCA000766
Capacitor, 1206, X7R, 630V, 22nF	MCCA000767
Capacitor, 1206, X7R, 630V, 33nF	MCCA000768
MLCC, 0603, NP0, 50V, 7pF	MCCA000189
MLCC, 0603, NP0, 50V, 8pF	MCCA000190
MLCC, 0603, NP0, 50V, 9pF	MCCA000191
MLCC, 0603, NP0, 50V, 10pF	MCCA000192
MLCC, 0603, NP0, 50V, 12pF	MCCA000193
MLCC, 0603, NP0, 50V, 15pF	MCCA000194
MLCC, 0603, NP0, 50V, 18pF	MCCA000195
MLCC, 0603, NP0, 50V, 22pF	MCCA000196

Description	Part Number
MLCC, 0603, NP0, 50V, 27pF	MCCA000197
MLCC, 0603, NP0, 50V, 33pF	MCCA000198
MLCC, 0603, NP0, 50V, 39pF	MCCA000199
MLCC, 0603, NP0, 50V, 47pF	MCCA000200
MLCC, 0603, NP0, 50V, 56pF	MCCA000201
MLCC, 0603, NP0, 50V, 68pF	MCCA000202
MLCC, 0603, NP0, 50V, 82pF	MCCA000203
MLCC, 0603, NP0, 50V, 100pF	MCCA000204
MLCC, 0603, NP0, 50V, 120pF	MCCA000205
MLCC, 0603, NP0, 50V, 150pF	MCCA000206
MLCC, 0603, NP0, 50V, 180pF	MCCA000207
MLCC, 0603, X7R, 50V, 220pF	MCCA000208
CAP, Ceramic, 220pF, 50V, X7R, 0603	MCCA000208
MLCC, 0603, X7R, 50V, 270pF	MCCA000210
MLCC, 0603, NP0, 50V, 270pF	MCCA000211
MLCC, 0603, X7R, 50V, 330pF	MCCA000212
MLCC, 0603, NP0, 50V, 330pF	MCCA000213
MLCC, 0603, X7R, 50V, 390pF	MCCA000214
MLCC, 0603, NP0, 50V, 390pF	MCCA000215
CAP, Ceramic, 470pF, 50V, X7R, 0603	MCCA000216
MLCC, 0603, NP0, 50V, 470pF	MCCA000217
MLCC, 0603, NP0, 50V, 560pF	MCCA000219
MLCC, 0603, X7R, 50V, 680pF	MCCA000220
MLCC, 0603, NP0, 50V, 680pF	MCCA000221
MLCC, 0603, X7R, 50V, 820pF	MCCA000222
MLCC, 0603, NP0, 50V, 820pF	MCCA000223
CAP, Ceramic, 1000pF, 50V, X7R, 0603	MCCA000224
MLCC, 0603, NP0, 50V, 1nF	MCCA000225
MLCC, 0603, X7R, 50V, 1.2nF	MCCA000226
CAP, Ceramic, 1500pF, 50V, X7R, 0603	MCCA000227
MLCC, 0603, X7R, 50V, 1.8nF	MCCA000228
CAP, Ceramic, 2200pF, 50V, X7R, 0603	MCCA000229
MLCC, 0603, X7R, 50V, 2.7nF	MCCA000230
MLCC, 0603, X7R, 50V, 3.9nF	MCCA000232
CAP, Ceramic, 4700pF, 50V, X7R, 0603	MCCA000233
MLCC, 0603, X7R, 50V, 5.6nF	MCCA000234
MLCC, 0603, X7R, 50V, 6.8nF	MCCA000235
MLCC, 0603, X7R, 50V, 8.2nF	MCCA000236
CAP, Ceramic, 0.01µF, 50V, X7R, 0603	MCCA000237
CAP, Ceramic, 0.01µF, 50V, Y5V, 0603	MCCA000238
MLCC, 0603, X7R, 50V, 12nF	MCCA000239
MLCC, 0603, X7R, 50V, 15nF	MCCA000240





Description	Part Number
MLCC, 0603, Y5V, 50V, 15nF	MCCA000241
MLCC, 0603, X7R, 50V, 18nF	MCCA000242
CAP, Ceramic, 0.022µF, 50V, X7R, 0603	MCCA000243
MLCC, 0603, Y5V, 50V, 22nF	MCCA000244
MLCC, 0603, X7R, 50V, 27nF	MCCA000245
MLCC, 0603, X7R, 50V, 33nF	MCCA000246
MLCC, 0603, Y5V, 50V, 33nF	MCCA000247
MLCC, 0603, X7R, 50V, 39nF	MCCA000248
MLCC, 0603, Y5V, 50V, 47nF	MCCA000250
MLCC, 0603, X7R, 50V, 56nF	MCCA000251
MLCC, 0603, X7R, 50V, 68nF	MCCA000252
MLCC, 0603, Y5V, 50V, 68nF	MCCA000253
MLCC, 0603, X7R, 50V, 82nF	MCCA000254
MLCC, 0603, NP0, 50V, 220pF	MCCA000209
MLCC, 0603, X7R, 50V, 270pF	MCCA000210
Capacitor, 1206, X7R, 1000V, 150pF	MCCA000769
Capacitor, 1206, X7R, 1000V, 220pF	MCCA000770
Capacitor, 1206, X7R, 1000V, 330pF	MCCA000771
Capacitor, 1206, X7R, 1000V, 470pF	MCCA000772
Capacitor, 1206, X7R, 1000V, 680pF	MCCA000773
Capacitor, 1206, X7R, 1000V, 1nF	MCCA000774
Capacitor, 1206, X7R, 1000V, 1.5nF	MCCA000775
Capacitor, 1206, X7R, 1000V, 2.2nF	MCCA000776
Capacitor, 1206, X7R, 1000V, 3.3nF	MCCA000777
Capacitor, 1206, X7R, 1000V, 4.7nF	MCCA000778
Capacitor, 1206, X7R, 1000V, 6.8nF	MCCA000779
Capacitor, 1206, X7R, 1000V, 10nF	MCCA000780
Capacitor, 1206, X7R, 2000V, 150pF	MCCA000781
Capacitor, 1206, X7R, 2000V, 220pF	MCCA000782
Capacitor, 1206, X7R, 2000V, 330pF	MCCA000783
Capacitor, 1206, X7R, 2000V, 470pF	MCCA000784
Capacitor, 1206, X7R, 2000V, 680pF	MCCA000785
Capacitor, 1206, X7R, 2000V, 1nF	MCCA000786
Capacitor, 1210, NP0, 1000V, 10pF	MCCA000787
Capacitor, 1210, NP0, 1000V, 15pF	MCCA000788
Capacitor, 1210, NP0, 1000V, 22pF	MCCA000789
Capacitor, 1210, NP0, 1000V, 33pF	MCCA000790
Capacitor, 1210, NP0, 1000V, 47pF	MCCA000791
Capacitor, 1210, NP0, 1000V, 68pF	MCCA000792
Capacitor, 1210, NP0, 1000V, 100pF	MCCA000793
Capacitor, 1210, NP0, 1000V, 150pF	MCCA000794
Capacitor, 1210, NP0, 1000V, 220pF	MCCA000795

Description	Part Number
Capacitor, 1210, NP0, 1000V, 330pF	MCCA000796
Capacitor, 1210, NP0, 1000V, 470pF	MCCA000797
Capacitor, 1210, NP0, 2000V, 10pF	MCCA000798
Capacitor, 1210, NP0, 2000V, 15pF	MCCA000799
Capacitor, 1210, NP0, 2000V, 22pF	MCCA000800
Capacitor, 1210, NP0, 2000V, 33pF	MCCA000801
Capacitor, 1210, NP0, 2000V, 47pF	MCCA000802
Capacitor, 1210, NP0, 2000V, 68pF	MCCA000803
MLCC, 0603, NP0, 50V, 270pF	MCCA000211
MLCC, 0603, X7R, 50V, 330pF	MCCA000212
MLCC, 0603, NP0, 50V, 330pF	MCCA000213
MLCC, 0603, X7R, 50V, 390pF	MCCA000214
MLCC, 0603, NP0, 50V, 390pF	MCCA000215
MLCC, 0603, X7R, 50V, 470pF	MCCA000216
MLCC, 0603, NP0, 50V, 470pF	MCCA000217
MLCC, 0603, X7R, 50V, 560pF	MCCA000218
MLCC, 0603, NP0, 50V, 560pF	MCCA000219
MLCC, 0603, X7R, 50V, 680pF	MCCA000220
MLCC, 0603, NP0, 50V, 680pF	MCCA000221
MLCC, 0603, X7R, 50V, 820pF	MCCA000222
MLCC, 0603, NP0, 50V, 820pF	MCCA000223
MLCC, 0603, X7R, 50V, 1nF	MCCA000224
MLCC, 0603, NP0, 50V, 1nF	MCCA000225
MLCC, 0603, X7R, 50V, 1.2nF	MCCA000226
MLCC, 0603, X7R, 50V, 1.5nF	MCCA000227
MLCC, 0603, X7R, 50V, 1.8nF	MCCA000228
MLCC, 0603, X7R, 50V, 2.2nF	MCCA000229
MLCC, 0603, X7R, 50V, 2.7nF	MCCA000230
MLCC, 0603, X7R, 50V, 3.3nF	MCCA000231
MLCC, 0603, X7R, 50V, 3.9nF	MCCA000232
MLCC, 0603, X7R, 50V, 4.7nF	MCCA000233
MLCC, 0603, X7R, 50V, 5.6nF	MCCA000234
MLCC, 0603, X7R, 50V, 6.8nF	MCCA000235
MLCC, 0603, X7R, 50V, 8.2nF	MCCA000236
MLCC, 0603, X7R, 50V, 10nF	MCCA000237
MLCC, 0603, Y5V, 50V, 10nF	MCCA000238
MLCC, 0603, X7R, 50V, 12nF	MCCA000239
MLCC, 0603, X7R, 50V, 15nF	MCCA000240
MLCC, 0603, Y5V, 50V, 15nF	MCCA000241
MLCC, 0603, X7R, 50V, 18nF	MCCA000242
MLCC, 0603, X7R, 50V, 22nF	MCCA000243
MLCC, 0603, Y5V, 50V, 22nF	MCCA000244





Description	Part Number
MLCC, 0603, X7R, 50V, 27nF	MCCA000245
MLCC, 0402, Y5V, 6.3V, 1µF	MCCA000035
MLCC, 0402, Y5V, 6.3V, 1µF	MCCA000035
Capacitor, 1210, NP0, 2000V, 100pF	MCCA000804
Capacitor, 1210, NP0, 2000V, 150pF	MCCA000805
Capacitor, 1210, NP0, 2000V, 220pF	MCCA000806
Capacitor, 1210, X7R, 200V, 1nF	MCCA000807
Capacitor, 1210, X7R, 200V, 1.5nF	MCCA000808
Capacitor, 1210, X7R, 200V, 2.2nF	MCCA000809
Capacitor, 1210, X7R, 200V, 3.3nF	MCCA000810
Capacitor, 1210, X7R, 200V, 4.7nF	MCCA000811
Capacitor, 1210, X7R, 200V, 6.8nF	MCCA000812
Capacitor, 1210, X7R, 200V, 10nF	MCCA000813
Capacitor, 1210, X7R, 200V, 15nF	MCCA000814
Capacitor, 1210, X7R, 200V, 22nF	MCCA000815
Capacitor, 1210, X7R, 200V, 33nF	MCCA000816
Capacitor, 1210, X7R, 200V, 47nF	MCCA000817
Capacitor, 1210, X7R, 200V, 68nF	MCCA000818
Capacitor, 1210, X7R, 200V, 100nF	MCCA000819
Capacitor, 1210, X7R, 200V, 150nF	MCCA000820
Capacitor, 1210, X7R, 200V, 220nF	MCCA000821
Capacitor, 1210, X7R, 200V, 330nF	MCCA000822
Capacitor, 1210, X7R, 200V, 470nF	MCCA000823
Capacitor, 1210, X7R, 630V, 1nF	MCCA000824
Capacitor, 1210, X7R, 630V, 1.5nF	MCCA000825
Capacitor, 1210, X7R, 630V, 2.2nF	MCCA000826
Capacitor, 1210, X7R, 630V, 3.3nF	MCCA000827
Capacitor, 1210, X7R, 630V, 4.7nF	MCCA000828
Capacitor, 1210, X7R, 630V, 6.8nF	MCCA000829
Capacitor, 1210, X7R, 630V, 10nF	MCCA000830
Capacitor, 1210, X7R, 630V, 15nF	MCCA000831
Capacitor, 1210, X7R, 630V, 22nF	MCCA000832
Capacitor, 1210, X7R, 630V, 33nF	MCCA000833
Capacitor, 1210, X7R, 630V, 47nF	MCCA000834
Capacitor, 1210, X7R, 1000V, 1nF	MCCA000835
Capacitor, 1210, X7R, 1000V, 1.5nF	MCCA000836
Capacitor, 1210, X7R, 1000V, 2.2nF	MCCA000837
Capacitor, 1210, X7R, 1000V, 3.3nF	MCCA000838
Capacitor, 1210, X7R, 1000V, 4.7nF	MCCA000839
MLCC, 0603, X7R, 50V, 33nF	MCCA000246
MLCC, 0603, Y5V, 50V, 33nF	MCCA000247
MLCC, 0603, X7R, 50V, 39nF	MCCA000248

Description	Part Number
MLCC, 0603, X7R, 50V, 47nF	MCCA000249
MLCC, 0603, Y5V, 50V, 47nF	MCCA000250
MLCC, 0603, X7R, 50V, 56nF	MCCA000251
MLCC, 0603, X7R, 50V, 68nF	MCCA000252
MLCC, 0603, Y5V, 50V, 68nF	MCCA000253
MLCC, 0603, X7R, 50V, 82nF	MCCA000254
MLCC, 0603, NP0, 100V, 15pF	MCCA000257
MLCC, 0603, NP0, 100V, 22pF	MCCA000258
MLCC, 0603, NP0, 100V, 33pF	MCCA000259
MLCC, 0603, NP0, 100V, 47pF	MCCA000260
MLCC, 0603, NP0, 100V, 68pF	MCCA000261
MLCC, 0603, NP0, 100V, 100pF	MCCA000262
MLCC, 0603, X7R, 100V, 220pF	MCCA000263
MLCC, 0603, X7R, 100V, 330pF	MCCA000264
MLCC, 0603, X7R, 100V, 470pF	MCCA000265
MLCC, 0603, X7R, 100V, 680pF	MCCA000266
MLCC, 0603, X7R, 100V, 100pF	MCCA000267
MLCC, 0805, Y5V, 6.3V, 10µF	MCCA000268
MLCC, 0805, X7R, 16V, 47nF	MCCA000270
MLCC, 0805, X7R, 16V, 56nF	MCCA000271
MLCC, 0805, X7R, 16V, 68nF	MCCA000272
MLCC, 0805, X7R, 16V, 82nF	MCCA000273
MLCC, 0805, Y5V, 16V, 100nF	MCCA000275
MLCC, 0805, X7R, 16V, 120nF	MCCA000276
MLCC, 0805, X7R, 16V, 150nF	MCCA000277
MLCC, 0805, Y5V, 16V, 150nF	MCCA000278
MLCC, 0805, X7R, 16V, 180nF	MCCA000279
MLCC, 0805, X7R, 16V, 220nF	MCCA000280
MLCC, 0805, Y5V, 16V, 220nF	MCCA000281
MLCC, 0805, X7R, 16V, 270nF	MCCA000282
CAP, MLCC, 4.7µF, 25V, X5R, 0805, Reel	MC0805X475K250CT
CAP, MLCC, 4.7µF, 6.3V, X5R, 0805, Reel	MC0805X475K6R3CT
CAP, MLCC, 4.7µF, 16V, X5R, 0805, Reel	MC0805X475K160CT
CAP, MLCC, 680pF, 50V, X7R, 0603, Reel	MC000494
CAP, MLCC, 10μF, 25V, X5R, 0805, Reel	MC0805X106K250CT
CAP, MLCC, 1µF, 50V, X5R, 0805, Reel	MC0805X105K500CT
CAP, MLCC, 470pF, 50V, X7R, 0603, Reel	MC000490
MLCC, 0402, Y5V, 10V, 220nF	MCCA000036
MLCC, 0402, X7R, 16V, 5.6nF	MCCA000037
MLCC, 0402, X7R, 16V, 6.8nF	MCCA000038
MLCC, 0402, X7R, 16V, 8.2nF	MCCA000039
MLCC, 0402, X7R, 16V, 10nF	MCCA000040





Description	Part Number
MLCC, 0402, X7R, 16V, 12nF	MCCA000041
MLCC, 0402, X7R, 16V, 15nF	MCCA000042
MLCC, 0402, Y5V, 16V, 15nF	MCCA000043
MLCC, 0402, X7R, 16V, 18nF	MCCA000044
MLCC, 0402, X7R, 16V, 22nF	MCCA000045
MLCC, 0402, Y5V, 16V, 22nF	MCCA000046
MLCC, 0402, Y5V, 16V, 33nF	MCCA000047
MLCC, 0402, Y5V, 16V, 47nF	MCCA000048
MLCC, 0402, Y5V, 16V, 68nF	MCCA000049
CAP, Ceramic, 0.1µF, 16V, X7R, 0402	MCCA000050
MLCC, 0402, Y5V, 16V, 100nF	MCCA000051
MLCC, 0402, X7R, 25V, 100pF	MCCA000052
MLCC, 0402, X7R, 25V, 120pF	MCCA000053
MLCC, 0402, X7R, 25V, 150pF	MCCA000054
MLCC, 0805, X7R, 16V, 330nF	MCCA000283
MLCC, 0805, Y5V, 16V, 330nF	MCCA000284
MLCC, 0805, X7R, 16V, 390nF	MCCA000285
MLCC, 0805, X7R, 16V, 470nF	MCCA000286
MLCC, 0805, Y5V, 16V, 470nF	MCCA000287
MLCC, 0805, Y5V, 16V, 680nF	MCCA000288
MLCC, 0805, X7R, 25V, 39nF	MCCA000289
MLCC, 0805, X7R, 25V, 47nF	MCCA000290
MLCC, 0805, X7R, 25V, 56nF	MCCA000291
MLCC, 0805, X7R, 25V, 68nF	MCCA000292
MLCC, 0805, Y5V, 25V, 68nF	MCCA000293
MLCC, 0805, X7R, 25V, 82nF	MCCA000294
MLCC, 0805, X7R, 25V, 120nF	MCCA000297
MLCC, 0805, X7R, 25V, 150nF	MCCA000298
MLCC, 0805, Y5V, 25V, 150nF	MCCA000299
MLCC, 0805, X7R, 25V, 180nF	MCCA000300
MLCC, 0805, X7R, 25V, 220nF	MCCA000301
MLCC, 0805, Y5V, 25V, 220nF	MCCA000302
MLCC, 0805, Y5V, 25V, 470nF	MCCA000304
MLCC, 0805, Y5V, 25V, 2.2µF	MCCA000306
MLCC, 0805, NP0, 50V, 0.5pF	MCCA000307
MLCC, 0805, NP0, 50V, 1pF	MCCA000308
MLCC, 0805, NP0, 50V, 1.5pF	MCCA000309
MLCC, 0805, NP0, 50V, 2pF	MCCA000310
MLCC, 0805, NP0, 50V, 3pF	MCCA000311
MLCC, 0805, NP0, 50V, 4pF	MCCA000312
MLCC, 0805, NP0, 50V, 5pF	MCCA000313
MLCC, 0805, NP0, 50V, 6pF	MCCA000314

Description	Part Number
MLCC, 0805, NP0, 50V, 7pF	MCCA000315
MLCC, 0805, NP0, 50V, 8pF	MCCA000316
MLCC, 0805, NP0, 50V, 9pF	MCCA000317
Capacitor, 1210, X7R, 1000V, 6.8nF	MCCA000840
Capacitor, 1210, X7R, 1000V, 10nF	MCCA000841
Capacitor, 1812, NP0, 1000V, 15pF	MCCA000842
Capacitor, 1812, NP0, 1000V, 22pF	MCCA000843
Capacitor, 1812, NP0, 1000V, 33pF	MCCA000844
Capacitor, 1812, NP0, 1000V, 47pF	MCCA000845
Capacitor, 1812, NP0, 1000V, 68pF	MCCA000846
Capacitor, 1812, NP0, 1000V, 100pF	MCCA000847
Capacitor, 1812, NP0, 1000V, 150pF	MCCA000848
Capacitor, 1812, NP0, 1000V, 220pF	MCCA000849
Capacitor, 1812, NP0, 1000V, 330pF	MCCA000850
Capacitor, 1812, NP0, 1000V, 470pF	MCCA000851
Capacitor, 1812, NP0, 1000V, 680pF	MCCA000852
Capacitor, 1812, NP0, 1000V, 1nF	MCCA000853
Capacitor, 1812, NP0, 1000V, 1.5nF	MCCA000854
Capacitor, 1812, NP0, 3000V, 10pF	MCCA000855
Capacitor, 1812, NP0, 3000V, 15pF	MCCA000856
Capacitor, 1812, NP0, 3000V, 22pF	MCCA000857
Capacitor, 1812, NP0, 3000V, 33pF	MCCA000858
Capacitor, 1812, NP0, 3000V, 47pF	MCCA000859
Capacitor, 1812, NP0, 3000V, 68pF	MCCA000860
Capacitor, 1812, NP0, 3000V, 100pF	MCCA000861
Capacitor, 1812, NP0, 3000V, 150pF	MCCA000862
Capacitor, 1812, NP0, 3000V, 220pF	MCCA000863
Capacitor, 1812, NP0, 3000V, 330pF	MCCA000864
Capacitor, 1812, NP0, 3000V, 470pF	MCCA000865
Capacitor, 1812, X7R, 630V, 1nF	MCCA000866
Capacitor, 1812, X7R, 630V, 1.5nF	MCCA000867
Capacitor, 1812, X7R, 630V, 2.2nF	MCCA000868
Capacitor, 1812, X7R, 630V, 3.3nF	MCCA000869
Capacitor, 1812, X7R, 630V, 4.7nF	MCCA000870
Capacitor, 1812, X7R, 630V, 6.8nF	MCCA000871
Capacitor, 1812, X7R, 630V, 10nF	MCCA000872
Capacitor, 1812, X7R, 630V, 15nF	MCCA000873
Capacitor, 1812, X7R, 630V, 22nF	MCCA000874
Capacitor, 1812, X7R, 630V, 33nF	MCCA000875
MLCC, 0402, X7R, 25V, 180pF	MCCA000055
MLCC, 0402, X7R, 25V, 220pF	MCCA000056
MLCC, 0402, X7R, 25V, 270pF	MCCA000057





Description	Part Number
MLCC, 0402, X7R, 25V, 330pF	MCCA000058
MLCC, 0402, X7R, 25V, 390pF	MCCA000059
MLCC, 0402, X7R, 25V, 470pF	MCCA000060
MLCC, 0402, X7R, 25V, 560pF	MCCA000061
MLCC, 0402, X7R, 25V, 680pF	MCCA000062
MLCC, 0402, X7R, 25V, 820pF	MCCA000063
MLCC, 0402, X7R, 25V, 1nF	MCCA000064
MLCC, 0402, X7R, 25V, 1.2nF	MCCA000065
MLCC, 0402, X7R, 25V, 1.5nF	MCCA000066
MLCC, 0402, X7R, 25V, 1.8nF	MCCA000067
MLCC, 0402, X7R, 25V, 2.2nF	MCCA000068
MLCC, 0402, X7R, 25V, 2.7nF	MCCA000069
MLCC, 0402, X7R, 25V, 3.3nF	MCCA000070
MLCC, 0402, X7R, 25V, 3.9nF	MCCA000071
MLCC, 0402, X7R, 25V, 4.7nF	MCCA000072
MLCC, 0402, X7R, 25V, 5.6nF	MCCA000073
MLCC, 0402, X7R, 25V, 6.8nF	MCCA000074
MLCC, 0402, X7R, 25V, 8.2nF	MCCA000075
CAP, Ceramic, 0.01µF, 25V, X7R, 0402	MCCA000076
MLCC, 0402, Y5V, 25V, 10nF	MCCA000077
MLCC, 0402, Y5V, 25V, 15nF	MCCA000078
MLCC, 0402, Y5V, 25V, 22nF	MCCA000079
MLCC, 0402, NP0, 50V, 0.5pF	MCCA000080
MLCC, 0402, NP0, 50V, 1pF	MCCA000081
MLCC, 0402, NP0, 50V, 1.5pF	MCCA000082
MLCC, 0402, NP0, 50V, 2pF	MCCA000083
MLCC, 0402, NP0, 50V, 3pF	MCCA000084
MLCC, 0402, NP0, 50V, 4pF	MCCA000085
MLCC, 0402, NP0, 50V, 5pF	MCCA000086
MLCC, 0402, NP0, 50V, 6pF	MCCA000087
MLCC, 0402, NP0, 50V, 7pF	MCCA000088
MLCC, 0402, NP0, 50V, 8pF	MCCA000089
MLCC, 0805, NP0, 50V, 27pF	MCCA000323
MLCC, 0805, NP0, 50V, 39pF	MCCA000325
MLCC, 0805, NP0, 50V, 47pF	MCCA000326
MLCC, 0805, NP0, 50V, 68pF	MCCA000328
MLCC, 0805, NP0, 50V, 82pF	MCCA000329
MLCC, 0805, NP0, 50V, 120pF	MCCA000331
MLCC, 0805, NP0, 50V, 150pF	MCCA000332
MLCC, 0805, NP0, 50V, 180pF	MCCA000333
MLCC, 0805, X7R, 50V, 220pF	MCCA000334
MLCC, 0805, NP0, 50V, 220pF	MCCA000335

Description	Part Number
MLCC, 0805, X7R, 50V, 270pF	MCCA000336
MLCC, 0805, NP0, 50V, 270pF	MCCA000330
	MCCA000337
MLCC, 0805, X7R, 50V, 330pF	
MLCC, 0805, NP0, 50V, 330pF	MCCA000339
MLCC, 0805, X7R, 50V, 390pF	MCCA000340
MLCC, 0805, NP0, 50V, 390pF	MCCA000341
MLCC, 0805, NP0, 50V, 470pF	MCCA000343
MLCC, 0805, X7R, 50V, 560pF	MCCA000344
MLCC, 0805, NP0, 50V, 560pF	MCCA000345
MLCC, 0805, X7R, 50V, 680pF	MCCA000346
MLCC, 0805, NP0, 50V, 680pF	MCCA000347
MLCC, 0805, X7R, 50V, 820pF	MCCA000348
MLCC, 0805, NP0, 50V, 820pF	MCCA000349
MLCC, 0805, NP0, 50V, 1nF	MCCA000351
MLCC, 0805, X7R, 50V, 1.2nF	MCCA000352
MLCC, 0805, NP0, 50V, 1.2nF	MCCA000353
MLCC, 0402, NP0, 50V, 9pF	MCCA000090
MLCC, 0402, NP0, 50V, 10pF	MCCA000091
MLCC, 0402, Y5V, 10V, 220nF	MCCA000036
MLCC, 0402, X7R, 16V, 5.6nF	MCCA000037
MLCC, 0402, X7R, 16V, 6.8nF	MCCA000038
MLCC, 0402, X7R, 16V, 8.2nF	MCCA000039
MLCC, 0402, X7R, 16V, 10nF	MCCA000040
MLCC, 0402, X7R, 16V, 12nF	MCCA000041
MLCC, 0402, X7R, 16V, 15nF	MCCA000042
MLCC, 0402, Y5V, 16V, 15nF	MCCA000043
MLCC, 0402, X7R, 16V, 18nF	MCCA000044
MLCC, 0402, X7R, 16V, 22nF	MCCA000045
MLCC, 0402, Y5V, 16V, 22nF	MCCA000046
MLCC, 0402, Y5V, 16V, 33nF	MCCA000047
MLCC, 0402, Y5V, 16V, 47nF	MCCA000048
MLCC, 0402, Y5V, 16V, 68nF	MCCA000049
MLCC, 0402, X7R, 16V, 100nF	MCCA000050
MLCC, 0402, Y5V, 16V, 100nF	MCCA000051
MLCC, 0402, X7R, 25V, 100pF	MCCA000052
MLCC, 0402, X7R, 25V, 120pF	MCCA000053
MLCC, 0402, X7R, 25V, 150pF	MCCA000054
MLCC, 0402, X7R, 25V, 180pF	MCCA000055
MLCC, 0402, X7R, 25V, 220pF	MCCA000056
MLCC, 0402, X7R, 25V, 270pF	MCCA000057
MLCC, 0402, X7R, 25V, 330pF	MCCA000058
MLCC, 0402, X7R, 25V, 390pF	MCCA000059





Description	Part Number
MLCC, 0402, X7R, 25V, 470pF	MCCA000060
MLCC, 0402, X7R, 25V, 560pF	MCCA000061
MLCC, 0402, X7R, 25V, 680pF	MCCA000062
MLCC, 0402, X7R, 25V, 820pF	MCCA000063
MLCC, 0402, X7R, 25V, 1nF	MCCA000064
MLCC, 0402, X7R, 25V, 1.2nF	MCCA000065
MLCC, 0402, X7R, 25V, 1.5nF	MCCA000066
MLCC, 0402, X7R, 25V, 1.8nF	MCCA000067
MLCC, 0402, X7R, 25V, 2.2nF	MCCA000068
MLCC, 0805, NP0, 50V, 1.5nF	MCCA000354
MLCC, 0805, X7R, 50V, 1.5nF	MCCA000355
MLCC, 0603, Y5V, 50V, 100nF	MCCA000256
MLCC, 0603, NP0, 100V, 15pF	MCCA000257
MLCC, 0603, NP0, 100V, 22pF	MCCA000258
MLCC, 0603, NP0, 100V, 33pF	MCCA000259
MLCC, 0603, NP0, 100V, 47pF	MCCA000260
MLCC, 0603, NP0, 100V, 68pF	MCCA000261
MLCC, 0603, NP0, 100V, 100pF	MCCA000262
MLCC, 0603, X7R, 100V, 220pF	MCCA000263
MLCC, 0603, X7R, 100V, 330pF	MCCA000264
MLCC, 0603, X7R, 100V, 470pF	MCCA000265
MLCC, 0603, X7R, 100V, 680pF	MCCA000266
MLCC, 0603, X7R, 100V, 1000pF	MCCA000267
MLCC, 0805, Y5V, 6.3V, 10µF	MCCA000268
MLCC, 0805, X7R, 16V, 47nF	MCCA000270
MLCC, 0805, X7R, 16V, 56nF	MCCA000271
MLCC, 0805, X7R, 16V, 68nF	MCCA000272
MLCC, 0805, X7R, 16V, 82nF	MCCA000273
MLCC, 0805, X7R, 16V, 100nF	MCCA000274
MLCC, 0805, Y5V, 16V, 100nF	MCCA000275
MLCC, 0805, X7R, 16V, 120nF	MCCA000276
MLCC, 0805, X7R, 16V, 150nF	MCCA000277
MLCC, 0805, Y5V, 16V, 150nF	MCCA000278
MLCC, 0805, X7R, 16V, 180nF	MCCA000279
MLCC, 0805, X7R, 16V, 220nF	MCCA000280
MLCC, 0805, Y5V, 16V, 220nF	MCCA000281
MLCC, 0805, X7R, 16V, 270nF	MCCA000282
MLCC, 0805, X7R, 16V, 330nF	MCCA000283
MLCC, 0805, Y5V, 16V, 330nF	MCCA000284
MLCC, 0805, X7R, 16V, 390nF	MCCA000285
MLCC, 0805, X7R, 16V, 470nF	MCCA000286
MLCC, 0805, Y5V, 16V, 470nF	MCCA000287

Description	Part Number
Capacitor, 1812, X7R, 630V, 47nF	MCCA000876
Capacitor, 1812, X7R, 630V, 68nF	MCCA000877
Capacitor, 1812, X7R, 630V, 100nF	MCCA000878
Capacitor, 1812, X7R, 1000V, 330pF	MCCA000879
Capacitor, 1812, X7R, 1000V, 470pF	MCCA000880
Capacitor, 1812, X7R, 1000V, 680pF	MCCA000881
Capacitor, 1812, X7R, 1000V, 1nF	MCCA000882
Capacitor, 1812, X7R, 1000V, 1.5nF	MCCA000883
Capacitor, 1812, X7R, 1000V, 2.2nF	MCCA000884
Capacitor, 1812, X7R, 1000V, 3.3nF	MCCA000885
Capacitor, 1812, X7R, 1000V, 4.7nF	MCCA000886
Capacitor, 1812, X7R, 1000V, 6.8nF	MCCA000887
Capacitor, 1812, X7R, 1000V, 10nF	MCCA000888
Capacitor, 1812, X7R, 1000V, 15nF	MCCA000889
Capacitor, 1812, X7R, 3000V, 680pF	MCCA000890
Capacitor, 1812, X7R, 3000V, 1nF	MCCA000891
CAP, MLCC, 10µF, 6.3V, X5R, 0805, Reel	MC0805X106K6R3CT
CAP, MLCC, 10µF, 16V, X5R, 0805, Reel	MC0805X106K160CT
CAP, MLCC, 10µF, 10V, X5R, 0805, Reel	MC0805X106K100CT
CAP, MLCC, 2.2µF, 10V, X5R, 0805, Reel	MC0805X225K100CT
CAP, MLCC, 10pF, 100V, NP0, 1206, Reel	MC1206N100J101CT
CAP, MLCC, 1µF, 100V, X7R, 1206, Reel	MC1206B105K101CT
CAP, MLCC, 2.2µF, 25V, X7R, 1206, Reel	MC1206B225K250CT
CAP, MLCC, 4.7µF, 25V, X7R, 1206, Reel	MC1206B475K250CT
CAP, MLCC, 1µF, 50V, X7R, 1206, Reel	MC1206B105J500CT
CAP, MLCC, 1µF, 50V, X7R, 1206, Reel	MC1206B105K500CT
CAP, MLCC, 4.7µF, 50V, X7R, 1206, Reel	MC1206B475K500CT
CAP, MLCC, 2.2µF, 16V, X7R, 1206, Reel	MC1206B225K160CT
CAP, MLCC, 2.2µF, 10V, X7R, 1206, Reel	MC1206B225K100CT
CAP, MLCC, 1nF, 200V, X7R, 1206, Reel	MC1206B102K201CT
CAP, MLCC, 100nF, 200V, X7R, 1206, Reel	MC1206B104K201CT
CAP, MLCC, 100pF, 500V, NP0, 1206, Reel	MC1206N101J501CT
CAP, MLCC, 220pF, 500V, NP0, 1206, Reel	MC1206N221J501CT
CAP, MLCC, 330pF, 500V, NP0, 1206, Reel	MC1206N331J501CT
CAP, MLCC, 470pF, 500V, NP0, 1206, Reel	MC1206N471J501CT
CAP, MLCC, 1nF, 500V, X7R, 1206, Reel	MC1206B102K501CT
MLCC, 0402, X7R, 25V, 2.7nF	MCCA000069
MLCC, 0402, X7R, 25V, 3.3nF	MCCA000070
MLCC, 0402, X7R, 25V, 3.9nF	MCCA000071
MLCC, 0402, X7R, 25V, 4.7nF	MCCA000072
MLCC, 0402, X7R, 25V, 5.6nF	MCCA000073
MLCC, 0402, X7R, 25V, 6.8nF	MCCA000074





Description	Part Number
MLCC, 0402, X7R, 25V, 8.2nF	MCCA000075
MLCC, 0402, X7R, 25V, 10nF	MCCA000076
MLCC, 0402, Y5V, 25V, 10nF	MCCA000077
MLCC, 0402, Y5V, 25V, 15nF	MCCA000078
MLCC, 0402, Y5V, 25V, 22nF	MCCA000079
MLCC, 0402, NP0, 50V, 0.5pF	MCCA000080
MLCC, 0402, NP0, 50V, 1pF	MCCA000081
MLCC, 0402, NP0, 50V, 1.5pF	MCCA000082
MLCC, 0402, NP0, 50V, 2pF	MCCA000083
MLCC, 0402, NP0, 50V, 3pF	MCCA000084
MLCC, 0402, NP0, 50V, 4pF	MCCA000085
MLCC, 0402, NP0, 50V, 5pF	MCCA000086
MLCC, 0402, NP0, 50V, 6pF	MCCA000087
MLCC, 0402, NP0, 50V, 7pF	MCCA000088
MLCC, 0402, NP0, 50V, 8pF	MCCA000089
MLCC, 0402, NP0, 50V, 9pF	MCCA000090
MLCC, 0402, NP0, 50V, 11pF	MCCA000092
MLCC, 0402, NP0, 50V, 12pF	MCCA000093
MLCC, 0402, NP0, 50V, 13pF	MCCA000094
MLCC, 0402, NP0, 50V, 15pF	MCCA000095
MLCC, 0402, NP0, 50V, 16pF	MCCA000096
MLCC, 0402, NP0, 50V, 18pF	MCCA000097
MLCC, 0402, NP0, 50V, 20pF	MCCA000098
MLCC, 0402, NP0, 50V, 22pF	MCCA000099
MLCC, 0402, NP0, 50V, 24pF	MCCA000100
MLCC, 0402, NP0, 50V, 27pF	MCCA000101
MLCC, 0402, NP0, 50V, 30pF	MCCA000102
MLCC, 0402, NP0, 50V, 33pF	MCCA000103
MLCC, 0402, NP0, 50V, 36pF	MCCA000104
MLCC, 0805, Y5V, 16V, 680nF	MCCA000288
MLCC, 0805, X7R, 25V, 39nF	MCCA000289
MLCC, 0805, X7R, 25V, 47nF	MCCA000290
MLCC, 0805, X7R, 25V, 56nF	MCCA000291
MLCC, 0805, X7R, 25V, 68nF	MCCA000292
MLCC, 0805, Y5V, 25V, 68nF	MCCA000293
MLCC, 0805, X7R, 25V, 82nF	MCCA000294
MLCC, 0805, X7R, 25V, 100nF	MCCA000295
MLCC, 0805, Y5V, 25V, 100nF	MCCA000296
MLCC, 0805, X7R, 25V, 120nF	MCCA000297
MLCC, 0805, X7R, 25V, 150nF	MCCA000298
MLCC, 0805, Y5V, 25V, 150nF	MCCA000299
MLCC, 0805, X7R, 25V, 180nF	MCCA000300

Description	Part Number
MLCC, 0805, X7R, 25V, 220nF	MCCA000301
MLCC, 0805, Y5V, 25V, 220nF	MCCA000302
MLCC, 0805, Y5V, 25V, 330nF	MCCA000303
MLCC, 0805, Y5V, 25V, 470nF	MCCA000304
MLCC, 0805, Y5V, 25V, 2.2µF	MCCA000306
MLCC, 0805, NP0, 50V, 0.5pF	MCCA000307
MLCC, 0805, NP0, 50V, 1pF	MCCA000308
MLCC, 0805, NP0, 50V, 1.5pF	MCCA000309
MLCC, 0805, NP0, 50V, 2pF	MCCA000310
MLCC, 0805, NP0, 50V, 3pF	MCCA000311
MLCC, 0805, NP0, 50V, 4pF	MCCA000312
MLCC, 0805, NP0, 50V, 5pF	MCCA000313
MLCC, 0805, NP0, 50V, 6pF	MCCA000314
MLCC, 0805, NP0, 50V, 8pF	MCCA000316
MLCC, 0805, NP0, 50V, 9pF	MCCA000317
MLCC, 0805, NP0, 50V, 10pF	MCCA000318
MLCC, 0805, NP0, 50V, 12pF	MCCA000319
MLCC, 0805, NP0, 50V, 15pF	MCCA000320
MLCC, 0805, NP0, 50V, 18pF	MCCA000321
MLCC, 0805, NP0, 50V, 22pF	MCCA000322
MLCC, 0805, NP0, 50V, 27pF	MCCA000323
MLCC, 1206, Y5V, 16V, 1µF	MCCA000557
MLCC, 1206, X7R, 16V, 1.5μF	MCCA000558
MLCC, 1206, Y5V, 16V, 1.5µF	MCCA000559
MLCC, 1206, X7R, 16V, 2.2μF	MCCA000560
MLCC, 1206, Y5V, 16V, 2.2µF	MCCA000561
MLCC, 1206, Y5V, 16V, 3.3µF	MCCA000562
MLCC, 1206, Y5V, 16V, 4.7µF	MCCA000563
MLCC, 1206, Y5V, 25V, 1µF	MCCA000566
MLCC, 1206, Y5V, 25V, 1.5µF	MCCA000567
MLCC, 1206, Y5V, 25V, 2.2µF	MCCA000568
MLCC, 1206, Y5V, 25V, 4.7µF	MCCA000569
MLCC, 1206, Y5V, 50V, 1µF	MCCA000572
MLCC, 1210, X5R, 6.3V, 22µF	MCCA000573
MLCC, 1210, X5R, 10V, 10μF	MCCA000575
MLCC, 1210, Y5V, 10V, 22μF	MCCA000576
MLCC, 1210, X5R, 10V, 22μF	MCCA000577
MLCC, 1210, X5R, 10V, 47μF	MCCA000578
MLCC, 1210, X5R, 16V, 4.7µF	MCCA000579
MLCC, 1210, Y5V, 16V, 10µF	MCCA000580
MLCC, 1210, X5R, 16V, 10μF	MCCA000581
MLCC, 1210, Y5V, 16V, 22µF	MCCA000582





Description	Part Number
MLCC, 1210, X5R, 16V, 22μF	MCCA000583
MLCC, 1210, X5R, 25V, 4.7μF	MCCA000584
MLCC, 1210, Y5V, 25V, 10µF	MCCA000585
MLCC, 0402, NP0, 50V, 39pF	MCCA000105
MLCC, 0402, NP0, 50V, 43pF	MCCA000106
MLCC, 0402, NP0, 50V, 47pF	MCCA000107
MLCC, 0402, NP0, 50V, 51pF	MCCA000108
MLCC, 0402, NP0, 50V, 56pF	MCCA000109
MLCC, 0402, NP0, 50V, 62pF	MCCA000110
MLCC, 0402, NP0, 50V, 68pF	MCCA000111
MLCC, 0402, NP0, 50V, 75pF	MCCA000112
MLCC, 0402, NP0, 50V, 82pF	MCCA000113
MLCC, 0402, NP0, 50V, 91pF	MCCA000114
MLCC, 0402, X7R, 50V, 100pF	MCCA000115
MLCC, 0402, NP0, 50V, 100pF	MCCA000116
MLCC, 0402, NP0, 50V, 110pF	MCCA000117
MLCC, 0402, X7R, 50V, 120pF	MCCA000118
MLCC, 0402, NP0, 50V, 120pF	MCCA000119
MLCC, 0402, NP0, 50V, 130pF	MCCA000120
MLCC, 0402, X7R, 50V, 150pF	MCCA000121
MLCC, 0402, NP0, 50V, 150pF	MCCA000122
MLCC, 0402, NP0, 50V, 160pF	MCCA000123
MLCC, 0402, X7R, 50V, 180pF	MCCA000124
MLCC, 0402, NP0, 50V, 180pF	MCCA000125
MLCC, 0402, NP0, 50V, 200pF	MCCA000126
MLCC, 0402, X7R, 50V, 220pF	MCCA000127
MLCC, 0402, NP0, 50V, 220pF	MCCA000128
MLCC, 0402, NP0, 50V, 10pF	MCCA000091
MLCC, 0402, NP0, 50V, 11pF	MCCA000092
MLCC, 0402, NP0, 50V, 12pF	MCCA000093
MLCC, 0402, NP0, 50V, 13pF	MCCA000094
MLCC, 0402, NP0, 50V, 15pF	MCCA000095
MLCC, 0402, NP0, 50V, 16pF	MCCA000096
MLCC, 0402, NP0, 50V, 18pF	MCCA000097
MLCC, 0402, NP0, 50V, 20pF	MCCA000098
MLCC, 0402, NP0, 50V, 22pF	MCCA000099
MLCC, 0402, NP0, 50V, 24pF	MCCA000100
MLCC, 0402, NP0, 50V, 27pF	MCCA000101
CAP, MLCC, 10nF, 500V, X7R, 1206, Reel	MC1206B103K501CT
CAP, MLCC, 4.7nF, 500V, X7R, 1206, Reel	MC1206B472K501CT
CAP, MLCC, 47pF, 1KV, NP0, 1206, Reel	MC1206N470K102CT
CAP, MLCC, 100pF, 100V, NP0, 1206, Reel	MC1206N101J101CT

Description	Part Number
CAP, MLCC, 1nF, 100V, NP0, 1206, Reel	MC1206N102J101CT
CAP, MLCC, 22pF, 100V, NP0, 1206, Reel	MC1206N220J101CT
CAP, MLCC, 220pF, 100V, NP0, 1206, Reel	MC1206N221J101CT
CAP, MLCC, 2.2nF, 100V, NP0, 1206, Reel	MC1206N222J101CT
CAP, MLCC, 33pF, 100V, NP0, 1206, Reel	MC1206N330J101CT
CAP, MLCC, 330pF, 100V, NP0, 1206, Reel	MC1206N331J101CT
CAP, MLCC, 47pF, 100V, NP0, 1206, Reel	MC1206N470J101CT
CAP, MLCC, 470pF, 100V, NP0, 1206, Reel	MC1206N471J101CT
CAP, MLCC, 1nF, 100V, X7R, 1206, Reel	MC1206B102K101CT
CAP, MLCC, 10nF, 100V, X7R, 1206, Reel	MC1206B103J101CT
CAP, MLCC, 10nF, 100V, X7R, 1206, Reel	MC1206B103K101CT
CAP, MLCC, 100nF, 100V, X7R, 1206, Reel	MC1206B104J101CT
CAP, MLCC, 2.2nF, 100V, X7R, 1206, Reel	MC1206B222K101CT
CAP, MLCC, 220nF, 100V, X7R, 1206, Reel	MC1206B224K101CT
CAP, MLCC, 3.3nF, 100V, X7R, 1206, Reel	MC1206B332K101CT
CAP, MLCC, 4.7nF, 100V, X7R, 1206, Reel	MC1206B472K101CT
CAP, MLCC, 47nF, 100V, X7R, 1206, Reel	MC1206B473K101CT
CAP, MLCC, 470nF, 100V, X7R, 1206, Reel	MC1206B474K101CT
CAP, MLCC, 68nF, 100V, X7R, 1206, Reel	MC1206B683K101CT
CAP, MLCC, 10nF, 25V, NP0, 1206, Reel	MC1206N103J250CT
CAP, MLCC, 680nF, 25V, X7R, 1206, Reel	MC1206B684K250CT
CAP, MLCC, 10µF, 25V, X5R, 1206, Reel	MC1206X106K250CT
CAP, MLCC, 10pF, 50V, NP0, 1206, Reel	MC1206N100J500CT
CAP, MLCC, 100pF, 50V, NP0, 1206, Reel	MC1206N101J500CT
CAP, MLCC, 1nF, 50V, NP0, 1206, Reel	MC1206N102J500CT
CAP, MLCC, 22pF, 50V, NP0, 1206, Reel	MC1206N220J500CT
CAP, MLCC, 220pF, 50V, NP0, 1206, Reel	MC1206N221J500CT
CAP, MLCC, 2.2nF, 50V, NP0, 1206, Reel	MC1206N222J500CT
CAP, MLCC, 33pF, 50V, NP0, 1206, Reel	MC1206N330J500CT
CAP, MLCC, 330pF, 50V, NP0, 1206, Reel	MC1206N331J500CT
CAP, MLCC, 3.3nF, 50V, NP0, 1206, Reel	MC1206N332J500CT
CAP, MLCC, 47pF, 50V, NP0, 1206, Reel	MC1206N470J500CT
MLCC, 0402, NP0, 50V, 30pF	MCCA000102
MLCC, 0402, NP0, 50V, 33pF	MCCA000103
MLCC, 0402, NP0, 50V, 36pF	MCCA000104
MLCC, 0402, NP0, 50V, 39pF	MCCA000105
MLCC, 0402, NP0, 50V, 43pF	MCCA000106
MLCC, 0402, NP0, 50V, 47pF	MCCA000107
MLCC, 0402, NP0, 50V, 51pF	MCCA000108
MLCC, 0402, NP0, 50V, 56pF	MCCA000109
MLCC, 0402, NP0, 50V, 62pF	MCCA000110
MLCC, 0402, NP0, 50V, 68pF	MCCA000111





Description	Part Number
MLCC, 0402, NP0, 50V, 75pF	MCCA000112
MLCC, 0402, NP0, 50V, 82pF	MCCA000113
MLCC, 0402, NP0, 50V, 91pF	MCCA000114
MLCC, 0402, X7R, 50V, 100pF	MCCA000115
MLCC, 0402, NP0, 50V, 100pF	MCCA000116
MLCC, 0402, NP0, 50V, 110pF	MCCA000117
MLCC, 0402, X7R, 50V, 120pF	MCCA000118
MLCC, 0402, NP0, 50V, 120pF	MCCA000119
MLCC, 0402, NP0, 50V, 130pF	MCCA000120
MLCC, 0402, X7R, 50V, 150pF	MCCA000121
MLCC, 0402, NP0, 50V, 150pF	MCCA000122
MLCC, 0402, NP0, 50V, 160pF	MCCA000123
MLCC, 0402, X7R, 50V, 180pF	MCCA000124
MLCC, 0402, NP0, 50V, 180pF	MCCA000125
MLCC, 0402, NP0, 50V, 200pF	MCCA000126
MLCC, 0402, X7R, 50V, 220pF	MCCA000127
MLCC, 0402, NP0, 50V, 220pF	MCCA000128
MLCC, 0402, X7R, 50V, 270pF	MCCA000129
MLCC, 0805, NP0, 50V, 33pF	MCCA000324
MLCC, 0805, NP0, 50V, 39pF	MCCA000325
MLCC, 0805, NP0, 50V, 47pF	MCCA000326
MLCC, 0805, NP0, 50V, 56pF	MCCA000327
MLCC, 0805, NP0, 50V, 68pF	MCCA000328
MLCC, 0805, NP0, 50V, 82pF	MCCA000329
MLCC, 0805, NP0, 50V, 100pF	MCCA000330
MLCC, 0805, NP0, 50V, 120pF	MCCA000331
MLCC, 0805, NP0, 50V, 150pF	MCCA000332
MLCC, 0805, NP0, 50V, 180pF	MCCA000333
MLCC, 0805, X7R, 50V, 220pF	MCCA000334
MLCC, 0805, NP0, 50V, 220pF	MCCA000335
MLCC, 0805, X7R, 50V, 270pF	MCCA000336
MLCC, 0805, NP0, 50V, 270pF	MCCA000337
MLCC, 0805, X7R, 50V, 330pF	MCCA000338
MLCC, 0805, NP0, 50V, 330pF	MCCA000339
MLCC, 0805, X7R, 50V, 390pF	MCCA000340
MLCC, 0805, NP0, 50V, 390pF	MCCA000341
MLCC, 0805, X7R, 50V, 470pF	MCCA000342
MLCC, 0805, NP0, 50V, 470pF	MCCA000343
MLCC, 0805, X7R, 50V, 560pF	MCCA000344
MLCC, 0805, NP0, 50V, 560pF	MCCA000345
MLCC, 0805, X7R, 50V, 680pF	MCCA000346
MLCC, 0805, NP0, 50V, 680pF	MCCA000347

Description	Dort Number
Description	Part Number
MLCC, 0805, X7R, 50V, 820pF	MCCA000348
MLCC, 0805, NP0, 50V, 820pF	MCCA000349
MLCC, 0805, X7R, 50V, 1nF	MCCA000350
MLCC, 0805, NP0, 50V, 1nF	MCCA000351
MLCC, 0805, X7R, 50V, 1.2nF	MCCA000352
MLCC, 0805, NP0, 50V, 1.2nF	MCCA000353
MLCC, 0805, NP0, 50V, 1.5nF	MCCA000354
MLCC, 0805, X7R, 50V, 1.5nF	MCCA000355
MLCC, 0805, X7R, 50V, 1.8nF	MCCA000356
MLCC, 1206, X7R, 16V, 1μF	MCCA000556
MLCC, 1206, Y5V, 16V, 1μF	MCCA000557
MLCC, 1206, X7R, 16V, 1.5μF	MCCA000558
MLCC, 1206, Y5V, 16V, 1.5μF	MCCA000559
MLCC, 1206, X7R, 16V, 2.2μF	MCCA000560
MLCC, 1206, Y5V, 16V, 2.2µF	MCCA000561
MLCC, 1206, Y5V, 16V, 3.3μF	MCCA000562
MLCC, 1206, Y5V, 16V, 4.7μF	MCCA000563
MLCC, 1206, Y5V, 16V, 10µF	MCCA000564
MLCC, 1206, X7R, 25V, 1μF	MCCA000565
MLCC, 1206, Y5V, 25V, 1μF	MCCA000566
MLCC, 1206, Y5V, 25V, 1.5μF	MCCA000567
MLCC, 1206, Y5V, 25V, 2.2μF	MCCA000568
MLCC, 1206, Y5V, 25V, 4.7μF	MCCA000569
MLCC, 1206, Y5V, 25V, 10μF	MCCA000570
MLCC, 1206, X7R, 50V, 1µF	MCCA000571
MLCC, 1206, Y5V, 50V, 1μF	MCCA000572
MLCC, 1210, X5R, 6.3V, 22μF	MCCA000573
MLCC, 1210, X5R, 6.3V, 100μF	MCCA000574
MLCC, 1210, X5R, 10V, 10µF	MCCA000575
MLCC, 1210, Y5V, 10V, 22µF	MCCA000576
MLCC, 1210, X5R, 10V, 22µF	MCCA000577
MLCC, 1210, X5R, 10V, 47μF	MCCA000578
MLCC, 1210, X5R, 16V, 4.7μF	MCCA000579
MLCC, 1210, Y5V, 16V, 10μF	MCCA000580
MLCC, 1210, X5R, 16V, 10µF	MCCA000581
MLCC, 1210, Y5V, 16V, 22μF	MCCA000582
MLCC, 1210, X5R, 16V, 22μF	MCCA000583
MLCC, 1210, X5R, 25V, 4.7μF	MCCA000584
MLCC, 1210, Y5V, 25V, 10μF	MCCA000585
CAP, MLCC, 470pF, 50V, NP0, 1206, Reel	MC1206N471J500CT
CAP, MLCC, 680pF, 50V, NP0, 1206, Reel	MC1206N681J500CT
CAP, MLCC, 1nF, 50V, X7R, 1206, Reel	MC1206B102K500CT





Description	Part Number
CAP, MLCC, 10nF, 50V, X7R, 1206, Reel	MC1206B103K500CT
CAP, MLCC, 100nF, 50V, X7R, 1206, Reel	MC1206B104J500CT
CAP, MLCC, 100nF, 50V, X7R, 1206, Reel	MC1206B104K500CT
CAP, MLCC, 2.2nF, 50V, X7R, 1206, Reel	MC1206B222K500CT
CAP, MLCC, 220nF, 50V, X7R, 1206, Reel	MC1206B224J500CT
CAP, MLCC, 3.3nF, 50V, X7R, 1206, Reel	MC1206B332K500CT
CAP, MLCC, 330nF, 50V, X7R, 1206, Reel	MC1206B334K500CT
CAP, MLCC, 4.7nF, 50V, X7R, 1206, Reel	MC1206B472K500CT
CAP, MLCC, 47nF, 50V, X7R, 1206, Reel	MC1206B473K500CT
CAP, MLCC, 470nF, 50V, X7R, 1206, Reel	MC1206B474J500CT
CAP, MLCC, 470nF, 50V, X7R, 1206, Reel	MC1206B474K500CT
CAP, MLCC, 68nF, 50V, X7R, 1206, Reel	MC1206B683K500CT
CAP, MLCC, 10µF, 16V, X7R, 1206, Reel	MC1206B106K160CT
CAP, MLCC, 10µF, 16V, X5R, 1206, Reel	MC1206X106K160CT
CAP, MLCC, 10µF, 10V, X5R, 1206, Reel	MC1206X106K100CT
MLCC, 0805, NP0, 50V, 1.8nF	MCCA000357
MLCC, 0805, X7R, 50V, 2.2nF	MCCA000358
MLCC, 0805, NP0, 50V, 2.2nF	MCCA000359
MLCC, 0805, X7R, 50V, 2.7nF	MCCA000360
MLCC, 0805, NP0, 50V, 2.7nF	MCCA000361
MLCC, 0805, X7R, 50V, 3.3nF	MCCA000362
MLCC, 0805, X7R, 50V, 3.9nF	MCCA000363
MLCC, 0805, X7R, 50V, 5.6nF	MCCA000365
MLCC, 0805, X7R, 50V, 6.8nF	MCCA000366
MLCC, 0805, X7R, 50V, 12nF	MCCA000370
MLCC, 0805, X7R, 50V, 15nF	MCCA000371
MLCC, 0805, Y5V, 50V, 15nF	MCCA000372
MLCC, 0805, X7R, 50V, 18nF	MCCA000373
MLCC, 0805, Y5V, 50V, 22nF	MCCA000375
MLCC, 0805, X7R, 50V, 27nF	MCCA000376
MLCC, 0805, Y5V, 50V, 33nF	MCCA000377
MLCC, 0805, X7R, 50V, 33nF	MCCA000378
MLCC, 0805, X7R, 50V, 39nF	MCCA000379
MLCC, 0805, Y5V, 50V, 47nF	MCCA000380
MLCC, 0805, X7R, 50V, 47nF	MCCA000381
MLCC, 0805, X7R, 50V, 56nF	MCCA000382
MLCC, 0805, X7R, 50V, 68nF	MCCA000383
MLCC, 0805, Y5V, 50V, 68nF	MCCA000384
MLCC, 0805, X7R, 50V, 82nF	MCCA000385
MLCC, 0805, Y5V, 50V, 100nF	MCCA000387
MLCC, 0805, Y5V, 50V, 150nF	MCCA000388
MLCC, 0805, NP0, 100V, 15pF	MCCA000391

Description	Part Number
MLCC, 0805, NP0, 100V, 22pF	MCCA000392
MLCC, 0805, NP0, 100V, 33pF	MCCA000393
MLCC, 0805, NP0, 100V, 47pF	MCCA000394
MLCC, 0805, NP0, 100V, 68pF	MCCA000395
MLCC, 0805, NP0, 100V, 100pF	MCCA000396
MLCC, 0805, NP0, 100V, 150pF	MCCA000397
MLCC, 0805, X7R, 100V, 220pF	MCCA000398
MLCC, 0805, NP0, 100V, 220pF	MCCA000399
MLCC, 0805, X7R, 100V, 330pF	MCCA000400
MLCC, 0805, NP0, 100V, 330pF	MCCA000401
MLCC, 0805, X7R, 100V, 470pF	MCCA000402
MLCC, 0805, NP0, 100V, 470pF	MCCA000403
MLCC, 0805, X7R, 100V, 680pF	MCCA000404
MLCC, 0805, NP0, 100V, 680pF	MCCA000405
MLCC, 0805, X7R, 100V, 1nF	MCCA000406
MLCC, 0805, NP0, 100V, 1nF	MCCA000407
MLCC, 0805, X7R, 100V, 1.5nF	MCCA000408
MLCC, 0805, X7R, 100V, 2.2nF	MCCA000409
MLCC, 0805, X7R, 100V, 3.3nF	MCCA000410
MLCC, 0805, X7R, 100V, 4.7nF	MCCA000411
MLCC, 0805, X7R, 100V, 6.8nF	MCCA000412
MLCC, 0805, X7R, 100V, 10nF	MCCA000413
MLCC, 0805, X7R, 100V, 15nF	MCCA000414
MLCC, 1206, X7R, 16V, 120nF	MCCA000417
MLCC, 1206, X7R, 16V, 150nF	MCCA000418
MLCC, 1206, X7R, 16V, 180nF	MCCA000419
MLCC, 1206, X7R, 16V, 220nF	MCCA000420
MLCC, 1206, X7R, 16V, 270nF	MCCA000421
MLCC, 1206, X7R, 16V, 330nF	MCCA000422
MLCC, 1206, X7R, 16V, 390nF	MCCA000423
MLCC, 1206, X7R, 16V, 470nF	MCCA000424
MLCC, 1206, X7R, 16V, 560nF	MCCA000425
MLCC, 1206, X7R, 16V, 680nF	MCCA000426
MLCC, 1206, Y5V, 16V, 680nF	MCCA000427
MLCC, 1206, X7R, 16V, 820nF	MCCA000428
MLCC, 1206, X7R, 25V, 120nF	MCCA000435
MLCC, 1206, X7R, 25V, 150nF	MCCA000436
MLCC, 1206, X7R, 25V, 180nF	MCCA000437
MLCC, 1206, X7R, 25V, 220nF	MCCA000438
MLCC, 1206, X7R, 25V, 270nF	MCCA000439
MLCC, 1206, X7R, 25V, 330nF	MCCA000440
MLCC, 1206, X7R, 25V, 390nF	MCCA000441





Description	Part Number
MLCC, 1206, X7R, 25V, 470nF	MCCA000442
MLCC, 1206, Y5V, 25V, 470nF	MCCA000443
MLCC, 1206, X7R, 25V, 560nF	MCCA000444
MLCC, 1206, X7R, 25V, 680nF	MCCA000445
MLCC, 1206, Y5V, 25V, 680nF	MCCA000446
MLCC, 1206, X7R, 25V, 820nF	MCCA000447
MLCC, 1206, NP0, 50V, 100pF	MCCA000448
MLCC, 1206, X7R, 50V, 220pF	MCCA000449
MLCC, 1206, X7R, 50V, 270pF	MCCA000450
MLCC, 1206, X7R, 50V, 330pF	MCCA000451
MLCC, 1206, X7R, 50V, 390pF	MCCA000452
MLCC, 1206, X7R, 50V, 470pF	MCCA000453
MLCC, 1206, X7R, 50V, 560pF	MCCA000454
MLCC, 1206, X7R, 50V, 680pF	MCCA000455
MLCC, 1206, X7R, 50V, 820pF	MCCA000456
MLCC, 1206, X7R, 50V, 1.2nF	MCCA000458
MLCC, 1206, X7R, 50V, 1.5nF	MCCA000459
MLCC, 1206, X7R, 50V, 1.8nF	MCCA000460
MLCC, 1206, X7R, 50V, 2.2nF	MCCA000461
MLCC, 1206, X7R, 50V, 2.7nF	MCCA000462
MLCC, 1206, X7R, 50V, 3.3nF	MCCA000463
MLCC, 1206, X7R, 50V, 3.9nF	MCCA000464
MLCC, 1206, X7R, 50V, 4.7nF	MCCA000465
MLCC, 1206, X7R, 50V, 5.6nF	MCCA000466
MLCC, 1206, X7R, 50V, 6.8nF	MCCA000467
MLCC, 1206, X7R, 50V, 8.2nF	MCCA000468
MLCC, 1206, X7R, 50V, 12nF	MCCA000470
MLCC, 1206, X7R, 50V, 15nF	MCCA000471
MLCC, 1206, X7R, 50V, 18nF	MCCA000472
MLCC, 0805, X7R, 50V, 1.8nF	MCCA000356
MLCC, 0805, NP0, 50V, 1.8nF	MCCA000357
MLCC, 0805, X7R, 50V, 2.2nF	MCCA000358
MLCC, 0805, NP0, 50V, 2.2nF	MCCA000359
MLCC, 0805, X7R, 50V, 2.7nF	MCCA000360
MLCC, 0805, NP0, 50V, 2.7nF	MCCA000361
MLCC, 0805, X7R, 50V, 3.3nF	MCCA000362
MLCC, 0805, X7R, 50V, 3.9nF	MCCA000363
MLCC, 0805, X7R, 50V, 4.7nF	MCCA000364
MLCC, 0805, X7R, 50V, 5.6nF	MCCA000365
MLCC, 0805, X7R, 50V, 6.8nF	MCCA000366
MLCC, 0805, X7R, 50V, 8.2nF	MCCA000367
MLCC, 0805, X7R, 50V, 10nF	MCCA000368

Description	Part Number
MLCC, 0805, Y5V, 50V, 10nF	MCCA000369
MLCC, 0805, X7R, 50V, 12nF	MCCA000370
MLCC, 0805, X7R, 50V, 15nF	MCCA000371
MLCC, 0805, Y5V, 50V, 15nF	MCCA000372
MLCC, 0805, X7R, 50V, 18nF	MCCA000373
MLCC, 0805, X7R, 50V, 22nF	MCCA000374
MLCC, 0805, Y5V, 50V, 22nF	MCCA000375
MLCC, 0805, X7R, 50V, 27nF	MCCA000376
MLCC, 0805, Y5V, 50V, 33nF	MCCA000377
MLCC, 0805, X7R, 50V, 33nF	MCCA000378
MLCC, 0805, X7R, 50V, 39nF	MCCA000379
MLCC, 0805, Y5V, 50V, 47nF	MCCA000380
MLCC, 0805, X7R, 50V, 47nF	MCCA000381
MLCC, 0805, X7R, 50V, 56nF	MCCA000381
MLCC, 0805, X7R, 50V, 68nF	MCCA000383
MLCC, 0805, Y5V, 50V, 68nF	MCCA000384
MLCC, 0805, X7R, 50V, 82nF	MCCA000385
MLCC, 0805, X7R, 50V, 100nF	MCCA000386
MLCC, 0805, Y5V, 50V, 100nF	MCCA000387
MLCC, 0805, Y5V, 50V, 150nF	MCCA000388
MLCC, 0402, X7R, 50V, 270pF	MCCA000129
MLCC, 0402, X7R, 50V, 330pF	MCCA000130
MLCC, 0402, X7R, 50V, 390pF	MCCA000131
MLCC, 0402, X7R, 50V, 470pF	MCCA000132
MLCC, 0402, X7R, 50V, 560pF	MCCA000133
MLCC, 0402, X7R, 50V, 680pF	MCCA000134
MLCC, 0402, X7R, 50V, 820pF	MCCA000135
CAP, Ceramic, 1000pF, 50V, X7R, 0402	MCCA000136
MLCC, 0402, X7R, 50V, 1.2nF	MCCA000137
MLCC, 0402, X7R, 50V, 1.5nF	MCCA000138
MLCC, 0402, X7R, 50V, 1.8nF	MCCA000139
MLCC, 0402, X7R, 50V, 2.2nF	MCCA000140
MLCC, 0402, X7R, 50V, 2.7nF	MCCA000141
MLCC, 0402, X7R, 50V, 3.3nF	MCCA000142
MLCC, 0402, X7R, 50V, 3.9nF	MCCA000143
MLCC, 0805, Y5V, 50V, 220nF	MCCA000389
MLCC, 0805, NP0, 100V, 15pF	MCCA000391
MLCC, 0805, NP0, 100V, 22pF	MCCA000392
MLCC, 0805, NP0, 100V, 33pF	MCCA000393
MLCC, 0805, NP0, 100V, 47pF	MCCA000394
MLCC, 0805, NP0, 100V, 100pF	MCCA000396
MLCC, 0805, NP0, 100V, 150pF	MCCA000397





Description	Part Number
MLCC, 0805, X7R, 100V, 220pF	MCCA000398
MLCC, 0805, NP0, 100V, 220pF	MCCA000399
MLCC, 0805, X7R, 100V, 330pF	MCCA000400
MLCC, 0805, NP0, 100V, 330pF	MCCA000401
MLCC, 0805, X7R, 100V, 470pF	MCCA000402
MLCC, 0805, NP0, 100V, 470pF	MCCA000403
MLCC, 0805, X7R, 100V, 680pF	MCCA000404
MLCC, 0805, NP0, 100V, 680pF	MCCA000405
MLCC, 0805, X7R, 100V, 1nF	MCCA000406
MLCC, 0805, NP0, 100V, 1nF	MCCA000407
MLCC, 0805, X7R, 100V, 1.5nF	MCCA000408
MLCC, 0805, X7R, 100V, 2.2nF	MCCA000409
MLCC, 0805, X7R, 100V, 3.3nF	MCCA000410
MLCC, 0805, X7R, 100V, 4.7nF	MCCA000411
MLCC, 0805, X7R, 100V, 6.8nF	MCCA000412
MLCC, 0805, X7R, 100V, 10nF	MCCA000413
MLCC, 0805, X7R, 100V, 15nF	MCCA000414
MLCC, 1206, X7R, 16V, 100nF	MCCA000416
MLCC, 1206, X7R, 16V, 120nF	MCCA000417
MLCC, 1206, X7R, 16V, 150nF	MCCA000418
MLCC, 1206, X7R, 16V, 180nF	MCCA000419
MLCC, 1206, X7R, 16V, 220nF	MCCA000420
MLCC, 1206, X7R, 16V, 270nF	MCCA000421
MLCC, 1206, X7R, 16V, 330nF	MCCA000422
MLCC, 1206, X7R, 16V, 390nF	MCCA000423
MLCC, 1206, X7R, 16V, 470nF	MCCA000424
MLCC, 1206, X7R, 16V, 560nF	MCCA000425
MLCC, 0402, Y5V, 50V, 10nF	MCCA000144
MLCC, 0603, Y5V, 10V, 680nF	MCCA000146
CAP, Ceramic, 0.01µF, 16V, X7R, 0603	MCCA000147
MLCC, 0603, X7R, 16V, 12nF	MCCA000148
MLCC, 0603, X7R, 16V, 15nF	MCCA000149
MLCC, 0603, X7R, 16V, 18nF	MCCA000150
MLCC, 0603, X7R, 16V, 22nF	MCCA000151
MLCC, 0603, X7R, 16V, 27nF	MCCA000152
MLCC, 0603, X7R, 16V, 33nF	MCCA000153
MLCC, 0603, X7R, 16V, 39nF	MCCA000154
MLCC, 0603, X7R, 16V, 47nF	MCCA000155
MLCC, 0603, X7R, 16V, 56nF	MCCA000156
MLCC, 0603, X7R, 16V, 68nF	MCCA000157
MLCC, 0603, X7R, 16V, 82nF	MCCA000158
CAP, Ceramic, 0.1µF, 16V, X7R, 0603	MCCA000159

Description	Part Number
MLCC, 0603, Y5V, 16V, 100nF	MCCA000160
MLCC, 0603, Y5V, 16V, 150nF	MCCA000161
MLCC, 0603, Y5V, 16V, 220nF	MCCA000161
	+
MLCC, 0402, X7R, 50V, 330pF	MCCA000130
MLCC, 0402, X7R, 50V, 390pF	MCCA000131
MLCC, 0402, X7R, 50V, 470pF	MCCA000132
MLCC, 0402, X7R, 50V, 560pF	MCCA000133
MLCC, 0402, X7R, 50V, 680pF	MCCA000134
MLCC, 1206, X7R, 16V, 680nF	MCCA000426
MLCC, 1206, Y5V, 16V, 680nF	MCCA000427
MLCC, 1206, X7R, 16V, 820nF	MCCA000428
MLCC, 1206, X7R, 25V, 100nF	MCCA000434
MLCC, 1206, X7R, 25V, 120nF	MCCA000435
MLCC, 1206, X7R, 25V, 150nF	MCCA000436
MLCC, 1206, X7R, 25V, 180nF	MCCA000437
MLCC, 1206, X7R, 25V, 220nF	MCCA000438
MLCC, 1206, X7R, 25V, 270nF	MCCA000439
MLCC, 1206, X7R, 25V, 330nF	MCCA000440
MLCC, 1206, X7R, 25V, 390nF	MCCA000441
MLCC, 1206, X7R, 25V, 470nF	MCCA000442
MLCC, 1206, Y5V, 25V, 470nF	MCCA000443
MLCC, 1206, X7R, 25V, 560nF	MCCA000444
MLCC, 1206, X7R, 25V, 680nF	MCCA000445
MLCC, 1206, Y5V, 25V, 680nF	MCCA000446
MLCC, 1206, X7R, 25V, 820nF	MCCA000447
MLCC, 1206, NP0, 50V, 100pF	MCCA000448
MLCC, 1206, X7R, 50V, 220pF	MCCA000449
MLCC, 1206, X7R, 50V, 270pF	MCCA000450
MLCC, 1206, X7R, 50V, 330pF	MCCA000451
MLCC, 1206, X7R, 50V, 390pF	MCCA000452
MLCC, 1206, X7R, 50V, 470pF	MCCA000453
MLCC, 1206, X7R, 50V, 560pF	MCCA000454
MLCC, 1206, X7R, 50V, 680pF	MCCA000455
MLCC, 1206, X7R, 50V, 820pF	MCCA000456
MLCC, 1206, X7R, 50V, 1nF	MCCA000457
MLCC, 1206, X7R, 50V, 1.2nF	MCCA000458
MLCC, 1206, X7R, 50V, 1.5nF	MCCA000459
MLCC, 1206, X7R, 50V, 1.8nF	MCCA000460
MLCC, 1206, X7R, 50V, 2.2nF	MCCA000461
CAP, MLCC, 3.3µF, 10V, X5R, 0805, Reel	MC000622
MLCC, 0402, X7R, 50V, 820pF	MCCA000135
MLCC, 0402, X7R, 50V, 1nF	MCCA000136





Description	Part Number
MLCC, 0402, X7R, 50V, 1.2nF	MCCA000137
MLCC, 0402, X7R, 50V, 1.5nF	MCCA000138
MLCC, 0402, X7R, 50V, 1.8nF	MCCA000139
MLCC, 0402, X7R, 50V, 2.2nF	MCCA000140
MLCC, 0402, X7R, 50V, 2.7nF	MCCA000141
MLCC, 0402, X7R, 50V, 3.3nF	MCCA000142
MLCC, 0402, X7R, 50V, 3.9nF	MCCA000143
MLCC, 0402, Y5V, 50V, 10nF	MCCA000144
MLCC, 0603, Y5V, 10V, 680nF	MCCA000146
MLCC, 0603, X7R, 16V, 10nF	MCCA000147
MLCC, 0603, X7R, 16V, 12nF	MCCA000148
MLCC, 0603, X7R, 16V, 15nF	MCCA000149
MLCC, 0603, X7R, 16V, 18nF	MCCA000150
MLCC, 0603, X7R, 16V, 22nF	MCCA000151
MLCC, 0603, X7R, 16V, 27nF	MCCA000152
MLCC, 0603, X7R, 16V, 33nF	MCCA000153
MLCC, 0603, X7R, 16V, 39nF	MCCA000154
MLCC, 0603, X7R, 16V, 47nF	MCCA000155
MLCC, 0603, X7R, 16V, 56nF	MCCA000156
MLCC, 0603, X7R, 16V, 68nF	MCCA000157
MLCC, 0603, X7R, 16V, 82nF	MCCA000158
MLCC, 0603, X7R, 16V, 100nF	MCCA000159
MLCC, 0603, Y5V, 16V, 100nF	MCCA000160
MLCC, 0603, Y5V, 16V, 150nF	MCCA000161
MLCC, 0603, Y5V, 16V, 220nF	MCCA000162
MLCC, 0603, Y5V, 16V, 330nF	MCCA000163
CAP, MLCC, 1µF, 25V, X7R, 1206, Reel	MC000656
CAP, MLCC, 4.7µF, 25V, X5R, 1206, Reel	MC1206X475K250CT
CAP, MLCC, 22µF, 6.3V, X5R, 1206, Reel	MC1206X226K6R3CT
CAP, MLCC, 22µF, 16V, X5R, 1206, Reel	MC1206X226K160CT
CAP, MLCC, 1µF, 100V, X7R, 1210, Reel	MC1210B105K101CT
CAP, MLCC, 2.2µF, 100V, X7R, 1210, Reel	MC1210B225K101CT
CAP, MLCC, 1µF, 25V, X7R, 1210, Reel	MC1210B105K250CT
CAP, MLCC, 2.2µF, 25V, X7R, 1210, Reel	MC1210B225K250CT
CAP, MLCC, 22µF, 25V, X5R, 1210, Reel	MC1210X226K250CT
CAP, MLCC, 4.7µF, 25V, X5R, 1210, Reel	MC1210X475K250CT
MLCC, 1206, X7R, 50V, 22nF	MCCA000473
MLCC, 1206, X7R, 50V, 27nF	MCCA000474
MLCC, 1206, X7R, 50V, 33nF	MCCA000475
MLCC, 1206, X7R, 50V, 39nF	MCCA000476
MLCC, 1206, X7R, 50V, 47nF	MCCA000477
MLCC, 1206, X7R, 100V, 22nF	MCCA000487

Description	Part Number
MLCC, 1206, X7R, 100V, 33nF	MCCA000488
MLCC, 1206, X7R, 100V, 47nF	MCCA000489
MLCC, 1210, Y5V, 6.3V, 47μF	MCCA000491
MLCC, 1210, Y5V, 50V, 10µF	MCCA000492
MLCC, 1210, X7R, 100V, 220nF	MCCA000493
MLCC, 1210, X7R, 100V, 470nF	MCCA000494
MLCC, 1210, X7R, 100V, 680nF	MCCA000495
MLCC, 0402, X5R, 6.3V, 0.22µF	MCCA000498
MLCC, 0402, X5R, 6.3V, 0.47µF	MCCA000499
MLCC, 0402, X5R, 6.3V, 2.2µF	MCCA000501
MLCC, 0402, X5R, 10V, 0.056µF	MCCA000502
MLCC, 0402, X5R, 10V, 0.068µF	MCCA000503
MLCC, 0402, X5R, 10V, 0.082µF	MCCA000504
MLCC, 1206, X7R, 50V, 2.7nF	MCCA000462
MLCC, 1206, X7R, 50V, 3.3nF	MCCA000463
MLCC, 1206, X7R, 50V, 3.9nF	MCCA000464
MLCC, 1206, X7R, 50V, 4.7nF	MCCA000465
MLCC, 1206, X7R, 50V, 5.6nF	MCCA000466
MLCC, 1206, X7R, 50V, 6.8nF	MCCA000467
MLCC, 1206, X7R, 50V, 8.2nF	MCCA000468
MLCC, 1206, X7R, 50V, 10nF	MCCA000469
MLCC, 1206, X7R, 50V, 12nF	MCCA000470
MLCC, 1206, X7R, 50V, 15nF	MCCA000471
MLCC, 1206, X7R, 50V, 18nF	MCCA000472
CAP, MLCC, 2.2µF, 6.3V, X5R, 0402, Reel	MC0402X225M6R3CT
CAP, MLCC, 2.2µF, 6.3V, X7R, 0603, Reel	MC0603B225K6R3CT
CAP, MLCC, 2.2µF, 6.3V, X5R, 0603, Reel	MC0603X225K6R3CT
CAP, MLCC, 4.7µF, 6.3V, X5R, 0603, Reel	MC0603X475K6R3CT
CAP, MLCC, 1µF, 16V, X7R, 0603, Reel	MC0603B105K160CT
CAP, MLCC, 2.2µF, 10V, X5R, 0603, Reel	MC0603X225K100CT
CAP, MLCC, 4.7µF, 10V, X5R, 0603, Reel	MC0603X475K100CT
CAP, MLCC, 1µF, 25V, X7R, 0805, Reel	MC0805B105K250CT
CAP, MLCC, 2.2µF, 25V, X7R, 0805, Reel	MC0805B225K250CT
CAP, MLCC, 1µF, 16V, X7R, 0805, Reel	MC0805B105K160CT
CAP, MLCC, 4.7µF, 16V, X7R, 0805, Reel	MC0805B475K160CT
CAP, MLCC, 1µF, 10V, X7R, 0805, Reel	MC0805B105K100CT
MLCC, 0402, X5R, 10V, 1µF	MCCA000506
MLCC, 0402, X5R, 16V, 0.027µF	MCCA000507
MLCC, 0402, X5R, 16V, 0.033μF	MCCA000508
MLCC, 0402, X5R, 16V, 0.039µF	MCCA000509
MLCC, 0402, X5R, 16V, 0.047µF	MCCA000510
MLCC, 0402, X5R, 16V, 0.068μF	MCCA000511





Description	Part Number
MLCC, 0402, X5R, 16V, 0.22µF	MCCA000513
MLCC, 0603, X5R, 6.3V, 0.82µF	MCCA000514
MLCC, 0603, X5R, 6.3V, 1µF	MCCA000515
MLCC, 0603, X5R, 6.3V, 2.2µF	MCCA000516
MLCC, 0603, X5R, 10V, 0.33µF	MCCA000518
MLCC, 0603, X5R, 10V, 0.47µF	MCCA000519
MLCC, 0603, X5R, 10V, 0.68µF	MCCA000520
MLCC, 0603, Y5V, 10V, 1µF	MCCA000521
MLCC, 0603, X5R, 10V, 2.2µF	MCCA000524
MLCC, 0603, X5R, 16V, 0.22µF	MCCA000525
MLCC, 0603, X5R, 16V, 0.33µF	MCCA000526
MLCC, 0603, X5R, 16V, 0.47µF	MCCA000527
MLCC, 0603, X5R, 16V, 0.68µF	MCCA000528
MLCC, 0805, X5R, 6.3V, 1.5µF	MCCA000532
MLCC, 0805, X5R, 6.3V, 2.2µF	MCCA000533
MLCC, 0805, X5R, 6.3V, 3.3µF	MCCA000534
MLCC, 0805, X5R, 6.3V, 4.7μF	MCCA000535
MLCC, 0805, X5R, 10V, 2.2µF	MCCA000537
MLCC, 0805, Y5V, 10V, 3.3µF	MCCA000538
MLCC, 0805, X5R, 10V, 3.3µF	MCCA000539
MLCC, 0805, Y5V, 10V, 4.7µF	MCCA000540
CAP, MLCC, 4.7µF, 10V, X7R, 0805, Reel	MC0805B475K100CT
CAP, MLCC, 4.7µF, 10V, X5R, 0805, Reel	MC000623
CAP, MLCC, 1µF, 16V, X7R, 1206, Reel	MC000708
CAP, MLCC, 1nF, 200V, X7R, 0603, Reel	MC0603B102K201CT
CAP, MLCC, 100pF, 200V, NP0, 0805, Reel	MC000542
CAP, MLCC, 1nF, 200V, X7R, 0805, Reel	MC0805B102K201CT
CAP, MLCC, 10nF, 200V, X7R, 0805, Reel	MC000544
CAP, MLCC, 22nF, 200V, X7R, 0805, Reel	MC0805B223K201CT
CAP, MLCC, 3.3nF, 200V, X7R, 0805, Reel	MC0805B332K201CT
CAP, MLCC, 10nF, 200V, X7R, 1206, Reel	MC000650
CAP, MLCC, 2.2nF, 200V, X7R, 1206, Reel	MC000652
CAP, MLCC, 22nF, 200V, X7R, 1206, Reel	MC000653
CAP, MLCC, 47nF, 200V, X7R, 1206, Reel	MC000654
CAP, MLCC, 1nF, 1KV, X7R, 1206, Reel	MC000706
CAP, MLCC, 1nF, 2KV, X7R, 1206, Reel	MC000707
CAP, MLCC, 100pF, 25V, NP0, 0402, Reel	MC0402N101J250CT
CAP, MLCC, 100nF, 25V, X7R, 0402, Reel	MC0402B104K250CT
CAP, MLCC, 4.7nF, 25V, X7R, 0402, Reel	MC0402B472K250CT
CAP, MLCC, 10nF, 25V, X7R, 0402, Reel	MC0402B103K250CT
CAP, MLCC, 100nF, 25V, X5R, 0402, Reel	MC0402X104K250CT
CAP, MLCC, 10pF, 50V, NP0, 0402, Reel	MC0402N100J500CT

Description	Part Number
CAP, MLCC, 100pF, 50V, NP0, 0402, Reel	MC0402N101K500CT
CAP, MLCC, 12pF, 50V, NP0, 0402, Reel	MC0402N120J500CT
CAP, MLCC, 15pF, 50V, NP0, 0402, Reel	MC0402N150J500CT
CAP, MLCC, 18pF, 50V, NP0, 0402, Reel	MC000376
CAP, MLCC, 20pF, 50V, NP0, 0402, Reel	MC0402N200J500CT
CAP, MLCC, 22pF, 50V, NP0, 0402, Reel	MC000378
CAP, MLCC, 220pF, 50V, NP0, 0402, Reel	MC0402N221J500CT
CAP, MLCC, 27pF, 50V, NP0, 0402, Reel	MC000380
CAP, MLCC, 33pF, 50V, NP0, 0402, Reel	MC000381
CAP, MLCC, 330pF, 50V, NP0, 0402, Reel	MC0402N331J500CT
CAP, MLCC, 47pF, 50V, NP0, 0402, Reel	MC0402N470J500CT
CAP, MLCC, 470pF, 50V, NP0, 0402, Reel	MC0402N471J500CT
CAP, MLCC, 56pF, 50V, NP0, 0402, Reel	MC000385
CAP, MLCC, 68pF, 50V, NP0, 0402, Reel	MC000386
CAP, MLCC, 1nF, 50V, X7R, 0402, Reel	MC0402B102J500CT
CAP, MLCC, 1µF, 50V, X7R, 1210, Reel	MC1210B105K500CT
CAP, MLCC, 4.7µF, 50V, X7R, 1210, Reel	MC1210B475K500CT
CAP, MLCC, 22µF, 6.3V, X5R, 1210, Reel	MC1210X226K6R3CT
CAP, MLCC, 47µF, 6.3V, X5R, 1210, Reel	MC1210X476K6R3CT
CAP, MLCC, 22µF, 16V, X7R, 1210, Reel	MC1210B226M160CT
CAP, MLCC, 4.7µF, 16V, X7R, 1210, Reel	MC1210B475K160CT
CAP, MLCC, 22µF, 16V, X5R, 1210, Reel	MC1210X226K160CT
CAP, MLCC, 22µF, 10V, X7R, 1210, Reel	MC1210B226K100CT
CAP, MLCC, 22µF, 10V, X5R, 1210, Reel	MC1210X226K100CT
CAP, MLCC, 100nF, 200V, X7R, 1210, Reel	MC1210B104K201CT
CAP, MLCC, 10nF, 500V, X7R, 1210, Reel	MC1210B103K501CT
CAP, MLCC, 33nF, 500V, X7R, 1210, Reel	MC1210B223K501CT
CAP, MLCC, 220nF, 25V, X7R, 1206, Reel	MC000657
CAP, MLCC, 330nF, 25V, X7R, 1206, Reel	MC000659
CAP, MLCC, 10µF, 6.3V, X5R, 1206, Reel	MC1206X106K6R3CT
CAP, MLCC, 470nF, 16V, X7R, 1206, Reel	MC000711
CAP, MLCC, 100nF, 100V, X7R, 1210, Reel	MC1210B104K101CT
CAP, MLCC, 470nF, 100V, X7R, 1210, Reel	MC000720
CAP, MLCC, 10µF, 25V, X7R, 1210, Reel	MC1210B106K250CT
CAP, MLCC, 470nF, 25V, X7R, 1210, Reel	MC1210B474K250CT
CAP, MLCC, 10µF, 25V, X5R, 1210, Reel	MC1210X106K250CT
CAP, MLCC, 100nF, 50V, X7R, 1210, Reel	MC1210B104K500CT
CAP, MLCC, 220nF, 50V, X7R, 1210, Reel	MC1210B224K500CT
CAP, MLCC, 330nF, 50V, X7R, 1210, Reel	MC1210B334K500CT
CAP, MLCC, 470nF, 50V, X7R, 1210, Reel	MC1210B474K500CT
CAP, MLCC, 10µF, 16V, X5R, 1210, Reel	MC1210X106K160CT
CAP, MLCC, 10µF, 10V, X5R, 1210, Reel	MC000744





Description	Part Number
MLCC, 0805, X5R, 10V, 4.7µF	MCCA000541
MLCC, 0805, Y5V, 16V, 1.5µF	MCCA000544
MLCC, 0805, Y5V, 16V, 2.2µF	MCCA000545
MLCC, 0805, X5R, 16V, 2.2µF	MCCA000546
MLCC, 0805, X5R, 25V, 2.2µF	MCCA000550
MLCC, 1206, X7R, 10V, 1.5µF	MCCA000553
MLCC, 1210, X5R, 25V, 10µF	MCCA000586
MLCC, 1210, Y5V, 50V, 4.7µF	MCCA000587
MLCC, 1812, X7R, 100V, 1µF	MCCA000589
MLCC, 0805, NP0, 200V, 15pF	MCCA000606
MLCC, 0805, NP0, 200V, 22pF	MCCA000607
MLCC, 0805, NP0, 200V, 33pF	MCCA000608
CAP, MLCC, 1nF, 50V, X7R, 0402, Reel	MC000388
CAP, MLCC, 1.5nF, 50V, X7R, 0402, Reel	MC0402B152J500CT
CAP, MLCC, 1.5nF, 50V, X7R, 0402, Reel	MC000390
CAP, MLCC, 220pF, 50V, X7R, 0402, Reel	MC000391
CAP, MLCC, 2.2nF, 50V, X7R, 0402, Reel	MC0402B222J500CT
CAP, MLCC, 2.2nF, 50V, X7R, 0402, Reel	MC000393
CAP, MLCC, 330pF, 50V, X7R, 0402, Reel	MC0402B331J500CT
CAP, MLCC, 330pF, 50V, X7R, 0402, Reel	MC0402B331K500CT
CAP, MLCC, 3.3nF, 50V, X7R, 0402, Reel	MC000396
CAP, MLCC, 470pF, 50V, X7R, 0402, Reel	MC0402B471J500CT
CAP, MLCC, 470pF, 50V, X7R, 0402, Reel	MC000398
CAP, MLCC, 4.7nF, 50V, X7R, 0402, Reel	MC0402B472K500CT
CAP, MLCC, 560pF, 50V, X7R, 0402, Reel	MC000400
CAP, MLCC, 100nF, 6.3V, X5R, 0402, Reel	MC0402X104K6R3CT
CAP, MLCC, 1µF, 6.3V, X5R, 0402, Reel	MC000402
CAP, MLCC, 220nF, 6.3V, X5R, 0402, Reel	MC000403
CAP, MLCC, 470nF, 6.3V, X5R, 0402, Reel	MC0402X474K6R3CT
CAP, MLCC, 1nF, 16V, X7R, 0402, Reel	MC0402B102K160CT
CAP, MLCC, 10nF, 16V, X7R, 0402, Reel	MC0402B103J160CT
CAP, MLCC, 100nF, 16V, X7R, 0402, Reel	MC000408
CAP, MLCC, 22nF, 16V, X7R, 0402, Reel	MC0402B223K160CT
CAP, MLCC, 100nF, 16V, X5R, 0402, Reel	MC000410
CAP, MLCC, 100nF, 10V, X5R, 0402, Reel	MC0402X104K100CT
CAP, MLCC, 1µF, 10V, X5R, 0402, Reel	MC0402X105K100CT
CAP, MLCC, 10pF, 100V, NP0, 0603, Reel	MC0603N100J101CT
CAP, MLCC, 100pF, 100V, NP0, 0603, Reel	MC0603N101J101CT
CAP, MLCC, 12pF, 100V, NP0, 0603, Reel	MC0603N120J101CT
CAP, MLCC, 15pF, 100V, NP0, 0603, Reel	MC000416
CAP, MLCC, 18pF, 100V, NP0, 0603, Reel	MC0603N180J101CT
CAP, MLCC, 22pF, 100V, NP0, 0603, Reel	MC000418

Description	Part Number
CAP, MLCC, 220pF, 100V, NP0, 0603, Reel	MC0603N221J101CT
CAP, MLCC, 27pF, 100V, NP0, 0603, Reel	MC0603N270J101CT
CAP, MLCC, 33pF, 100V, NP0, 0603, Reel	MC0603N330J101CT
CAP, MLCC, 330pF, 100V, NP0, 0603, Reel	MC0603N331J101CT
CAP, MLCC, 47pF, 100V, NP0, 0603, Reel	MC0603N470J101CT
CAP, MLCC, 68pF, 100V, NP0, 0603, Reel	MC000424
CAP, MLCC, 1nF, 100V, X7R, 0603, Reel	MC0603B102J101CT
CAP, MLCC, 1nF, 100V, X7R, 0603, Reel	MC000426
CAP, MLCC, 10nF, 100V, X7R, 0603, Reel	MC0603B103J101CT
CAP, MLCC, 10nF, 100V, X7R, 0603, Reel	MC0603B103K101CT
CAP, MLCC, 1.5nF, 100V, X7R, 0603, Reel	MC0603B152J101CT
CAP, MLCC, 2.2nF, 100V, X7R, 0603, Reel	MC0603B222K101CT
CAP, MLCC, 330pF, 100V, X7R, 0603, Reel	MC0603B331K101CT
CAP, MLCC, 470pF, 100V, X7R, 0603, Reel	MC0603B471J101CT
CAP, MLCC, 470pF, 100V, X7R, 0603, Reel	MC000433
CAP, MLCC, 4.7nF, 100V, X7R, 0603, Reel	MC0603B472J101CT
CAP, MLCC, 4.7nF, 100V, X7R, 0603, Reel	MC0603B472K101CT
CAP, MLCC, 10nF, 25V, X7R, 0603, Reel	MC000437
CAP, MLCC, 100nF, 25V, X7R, 0603, Reel	MC0603B104J250CT
CAP, MLCC, 100nF, 25V, X7R, 0603, Reel	MC0603B104K250CT
CAP, MLCC, 22nF, 25V, X7R, 0603, Reel	MC0603B223K250CT
CAP, MLCC, 220nF, 25V, X7R, 0603, Reel	MC0603B224K250CT
CAP, MLCC, 33nF, 25V, X7R, 0603, Reel	MC000442
CAP, MLCC, 47nF, 25V, X7R, 0603, Reel	MC0603B473J250CT
CAP, MLCC, 47nF, 25V, X7R, 0603, Reel	MC000444
CAP, MLCC, 470nF, 25V, X7R, 0603, Reel	MC0603B474K250CT
CAP, MLCC, 1µF, 25V, X5R, 0603, Reel	MC000446
CAP, MLCC, 220nF, 25V, X5R, 0603, Reel	MC0603X224K250CT
CAP, MLCC, 10pF, 50V, NP0, 0603, Reel	MC0603N100J500CT
CAP, MLCC, 100pF, 50V, NP0, 0603, Reel	MC0603N101J500CT
CAP, MLCC, 1nF, 50V, NP0, 0603, Reel	MC000450
CAP, MLCC, 12pF, 50V, NP0, 0603, Reel	MC0603N120J500CT
CAP, MLCC, 120pF, 50V, NP0, 0603, Reel	MC000452
CAP, MLCC, 15pF, 50V, NP0, 0603, Reel	MC0603N150J500CT
CAP, MLCC, 150pF, 50V, NP0, 0603, Reel	MC000454
CAP, MLCC, 18pF, 50V, NP0, 0603, Reel	MC0603N180J500CT
CAP, MLCC, 180pF, 50V, NP0, 0603, Reel	MC000456
CAP, MLCC, 22pF, 50V, NP0, 0603, Reel	MC0603N220J500CT
CAP, MLCC, 220pF, 50V, NP0, 0603, Reel	MC0603N221J500CT
CAP, MLCC, 27pF, 50V, NP0, 0603, Reel	MC000459
CAP, MLCC, 33pF, 50V, NP0, 0603, Reel	MC0603N330J500CT
CAP, MLCC, 330pF, 50V, NP0, 0603, Reel	MC000462





Description	Part Number
CAP, MLCC, 39pF, 50V, NP0, 0603, Reel	MC000463
CAP, MLCC, 47pF, 50V, NP0, 0603, Reel	MC0603N470J500CT
CAP, MLCC, 470pF, 50V, NP0, 0603, Reel	MC000465
CAP, MLCC, 56pF, 50V, NP0, 0603, Reel	MC0603N560J500CT
CAP, MLCC, 560pF, 50V, NP0, 0603, Reel	MC000467
CAP, MLCC, 68pF, 50V, NP0, 0603, Reel	MC000468
CAP, MLCC, 680pF, 50V, NP0, 0603, Reel	MC000469
CAP, MLCC, 82pF, 50V, NP0, 0603, Reel	MC000470
CAP, MLCC, 820pF, 50V, NP0, 0603, Reel	MC000471
CAP, MLCC, 1nF, 50V, X7R, 0603, Reel	MC0603B102J500CT
CAP, MLCC, 1nF, 50V, X7R, 0603, Reel	MC0603B102K500CT
CAP, MLCC, 10nF, 50V, X7R, 0603, Reel	MC0603B103J500CT
CAP, MLCC, 10nF, 50V, X7R, 0603, Reel	MC0603B103K500CT
CAP, MLCC, 100nF, 50V, X7R, 0603, Reel	MC0603B104J500CT
CAP, MLCC, 100nF, 50V, X7R, 0603, Reel	MC0603B104K500CT
CAP, MLCC, 1.5nF, 50V, X7R, 0603, Reel	MC0603B152J500CT
CAP, MLCC, 1.5nF, 50V, X7R, 0603, Reel	MC000479
CAP, MLCC, 15nF, 50V, X7R, 0603, Reel	MC0603B153J500CT
CAP, MLCC, 15nF, 50V, X7R, 0603, Reel	MC0603B153K500CT
CAP, MLCC, 220pF, 50V, X7R, 0603, Reel	MC0603B221K500CT
CAP, MLCC, 2.2nF, 50V, X7R, 0603, Reel	MC0603B222J500CT
CAP, MLCC, 2.2nF, 50V, X7R, 0603, Reel	MC0603B222K500CT
CAP, MLCC, 22nF, 50V, X7R, 0603, Reel	MC0603B223K500CT
CAP, MLCC, 3.3nF, 50V, X7R, 0603, Reel	MC0603B332J500CT
CAP, MLCC, 3.3nF, 50V, X7R, 0603, Reel	MC000487
CAP, MLCC, 33nF, 50V, X7R, 0603, Reel	MC0603B333J500CT
CAP, MLCC, 33nF, 50V, X7R, 0603, Reel	MC0603B333K500CT
CAP, MLCC, 4.7nF, 50V, X7R, 0603, Reel	MC0603B472J500CT
CAP, MLCC, 4.7nF, 50V, X7R, 0603, Reel	MC000492
CAP, MLCC, 47nF, 50V, X7R, 0603, Reel	MC000493
CAP, MLCC, 6.8nF, 50V, X7R, 0603, Reel	MC0603B682K500CT
CAP, MLCC, 68nF, 50V, X7R, 0603, Reel	MC0603B683K500CT
CAP, MLCC, 1µF, 6.3V, X5R, 0603, Reel	MC000498
CAP, MLCC, 10nF, 16V, X7R, 0603, Reel	MC0603B103K160CT
CAP, MLCC, 100nF, 16V, X7R, 0603, Reel	MC0603B104J160CT
CAP, MLCC, 100nF, 16V, X7R, 0603, Reel	MC000503
CAP, MLCC, 47nF, 16V, X7R, 0603, Reel	MC000505
CAP, MLCC, 1µF, 16V, X5R, 0603, Reel	MC000506
CAP, MLCC, 220nF, 16V, X5R, 0603, Reel	MC0603X224K160CT
CAP, MLCC, 330nF, 16V, X5R, 0603, Reel	MC0603X334K160CT
CAP, MLCC, 470nF, 16V, X5R, 0603, Reel	MC0603X474K160CT
CAP, MLCC, 150nF, 10V, X7R, 0603, Reel	MC0603B154K100CT

Description	Part Number
CAP, MLCC, 220nF, 10V, X7R, 0603, Reel	MC0603B224K100CT
CAP, MLCC, 1µF, 10V, X5R, 0603, Reel	MC0603X105K100CT
CAP, MLCC, 470nF, 10V, X5R, 0603, Reel	MC000514
CAP, MLCC, 10pF, 100V, NP0, 0805, Reel	MC0805N100J101CT
CAP, MLCC, 100pF, 100V, NP0, 0805, Reel	MC000517
CAP, MLCC, 1nF, 100V, NP0, 0805, Reel	MC000518
CAP, MLCC, 15pF, 100V, NP0, 0805, Reel	MC000519
CAP, MLCC, 150pF, 100V, NP0, 0805, Reel	MC000520
CAP, MLCC, 18pF, 100V, NP0, 0805, Reel	MC0805N180J101CT
CAP, MLCC, 22pF, 100V, NP0, 0805, Reel	MC0805N220J101CT
CAP, MLCC, 220pF, 100V, NP0, 0805, Reel	MC000523
CAP, MLCC, 33pF, 100V, NP0, 0805, Reel	MC000524
CAP, MLCC, 330pF, 100V, NP0, 0805, Reel	MC0805N331J101CT
CAP, MLCC, 47pF, 100V, NP0, 0805, Reel	MC0805N470J101CT
CAP, MLCC, 470pF, 100V, NP0, 0805, Reel	MC0805N471J101CT
CAP, MLCC, 680pF, 100V, NP0, 0805, Reel	MC000528
CAP, MLCC, 1nF, 100V, X7R, 0805, Reel	MC000529
CAP, MLCC, 10nF, 100V, X7R, 0805, Reel	MC0805B103K101CT
CAP, MLCC, 100nF, 100V, X7R, 0805, Reel	MC0805B104K101CT
CAP, MLCC, 1.5nF, 100V, X7R, 0805, Reel	MC0805B152K101CT
CAP, MLCC, 2.2nF, 100V, X7R, 0805, Reel	MC0805B222J101CT
CAP, MLCC, 2.2nF, 100V, X7R, 0805, Reel	MC0805B222K101CT
CAP, MLCC, 22nF, 100V, X7R, 0805, Reel	MC0805B223K101CT
CAP, MLCC, 3.3nF, 100V, X7R, 0805, Reel	MC0805B332K101CT
CAP, MLCC, 33nF, 100V, X7R, 0805, Reel	MC0805B333K101CT
CAP, MLCC, 470pF, 100V, X7R, 0805, Reel	MC0805B471K101CT
CAP, MLCC, 4.7nF, 100V, X7R, 0805, Reel	MC0805B472K101CT
CAP, MLCC, 47nF, 100V, X7R, 0805, Reel	MC0805B473K101CT
CAP, MLCC, 6.8nF, 100V, X7R, 0805, Reel	MC0805B682K101CT
CAP, MLCC, 100nF, 25V, X7R, 0805, Reel	MC0805B104K250CT
MLCC, 0805, NP0, 200V, 47pF	MCCA000609
MLCC, 0805, NP0, 200V, 68pF	MCCA000610
MLCC, 0805, NP0, 200V, 100pF	MCCA000611
MLCC, 0805, NP0, 200V, 150pF	MCCA000612
MLCC, 0805, X7R, 200V, 220pF	MCCA000613
MLCC, 0805, NP0, 200V, 220pF	MCCA000614
MLCC, 0805, X7R, 200V, 330pF	MCCA000615
MLCC, 0805, NP0, 200V, 330pF	MCCA000616
MLCC, 0805, X7R, 200V, 470pF	MCCA000617
MLCC, 0805, X7R, 200V, 680pF	MCCA000618
MLCC, 0805, X7R, 200V, 1nF	MCCA000619
MLCC, 0805, X7R, 200V, 1.5nF	MCCA000620





Description	Part Number
MLCC, 0805, X7R, 200V, 2.2nF	MCCA000621
MLCC, 0805, X7R, 200V, 3.3nF	MCCA000622
MLCC, 0805, X7R, 200V, 4.7nF	MCCA000623
MLCC, 0805, X7R, 200V, 6.8nF	MCCA000624
MLCC, 0805, X7R, 200V, 10nF	MCCA000625
MLCC, 1206, NP0, 200V, 1nF	MCCA000626
MLCC, 1206, X7R, 200V, 15nF	MCCA000627
MLCC, 1206, X7R, 200V, 22nF	MCCA000628
MLCC, 1206, NP0, 630V, 100pF	MCCA000629
MLCC, 1206, X7R, 630V, 1nF	MCCA000630
MLCC, 1206, X7R, 630V, 2.2nF	MCCA000631
MLCC, 1206, X7R, 630V, 4.7nF	MCCA000632
MLCC, 1206, X7R, 630V, 10nF	MCCA000633
MLCC, 1206, X7R, 50V, 22nF	MCCA000473
MLCC, 1206, X7R, 50V, 27nF	MCCA000474
MLCC, 1206, X7R, 50V, 33nF	MCCA000475
MLCC, 1206, X7R, 50V, 39nF	MCCA000476
MLCC, 1206, X7R, 50V, 47nF	MCCA000477
MLCC, 1206, X7R, 50V, 100nF	MCCA000478
MLCC, 1206, X7R, 50V, 220nF	MCCA000479
CAP, MLCC, 220nF, 25V, X7R, 0805, Reel	MC0805B224J250CT
CAP, MLCC, 220nF, 25V, X7R, 0805, Reel	MC0805B224K250CT
CAP, MLCC, 330nF, 25V, X7R, 0805, Reel	MC0805B334K250CT
CAP, MLCC, 470nF, 25V, X7R, 0805, Reel	MC0805B474K250CT
CAP, MLCC, 1µF, 25V, X5R, 0805, Reel	MC0805X105K250CT
CAP, MLCC, 10pF, 50V, NP0, 0805, Reel	MC0805N100J500CT
CAP, MLCC, 100pF, 50V, NP0, 0805, Reel	MC0805N101J500CT
CAP, MLCC, 1nF, 50V, NP0, 0805, Reel	MC000559
CAP, MLCC, 12pF, 50V, NP0, 0805, Reel	MC0805N120J500CT
CAP, MLCC, 15pF, 50V, NP0, 0805, Reel	MC000561
CAP, MLCC, 150pF, 50V, NP0, 0805, Reel	MC000562
CAP, MLCC, 1.5nF, 50V, NP0, 0805, Reel	MC000563
CAP, MLCC, 18pF, 50V, NP0, 0805, Reel	MC000564
CAP, MLCC, 22pF, 50V, NP0, 0805, Reel	MC0805N220J500CT
CAP, MLCC, 220pF, 50V, NP0, 0805, Reel	MC000566
CAP, MLCC, 2.2nF, 50V, NP0, 0805, Reel	MC000567
CAP, MLCC, 27pF, 50V, NP0, 0805, Reel	MC000568
CAP, MLCC, 270pF, 50V, NP0, 0805, Reel	MC0805N271J500CT
CAP, MLCC, 33pF, 50V, NP0, 0805, Reel	MC000570
CAP, MLCC, 330pF, 50V, NP0, 0805, Reel	MC0805N331J500CT
CAP, MLCC, 47pF, 50V, NP0, 0805, Reel	MC0805N470J500CT
CAP, MLCC, 470pF, 50V, NP0, 0805, Reel	MC0805N471J500CT

Description	Part Number
CAP, MLCC, 510pF, 50V, NP0, 0805, Reel	MC0805N511J500CT
CAP, MLCC, 560pF, 50V, NP0, 0805, Reel	MC000575
CAP, MLCC, 68pF, 50V, NP0, 0805, Reel	MC0805N680J500CT
CAP, MLCC, 680pF, 50V, NP0, 0805, Reel	MC000577
CAP, MLCC, 82pF, 50V, NP0, 0805, Reel	MC000578
CAP, MLCC, 820pF, 50V, NP0, 0805, Reel	MC000579
CAP, MLCC, 1nF, 50V, X7R, 0805, Reel	MC0805B102J500CT
CAP, MLCC, 1nF, 50V, X7R, 0805, Reel	MC000581
CAP, MLCC, 10nF, 50V, X7R, 0805, Reel	MC0805B103J500CT
CAP, MLCC, 10nF, 50V, X7R, 0805, Reel	MC0805B103K500CT
CAP, MLCC, 100nF, 50V, X7R, 0805, Reel	MC0805B104J500CT
CAP, MLCC, 100nF, 50V, X7R, 0805, Reel	MC000585
CAP, MLCC, 1.5nF, 50V, X7R, 0805, Reel	MC0805B152K500CT
CAP, MLCC, 15nF, 50V, X7R, 0805, Reel	MC000587
CAP, MLCC, 2.2nF, 50V, X7R, 0805, Reel	MC0805B222J500CT
CAP, MLCC, 2.2nF, 50V, X7R, 0805, Reel	MC000589
CAP, MLCC, 22nF, 50V, X7R, 0805, Reel	MC0805B223J500CT
CAP, MLCC, 22nF, 50V, X7R, 0805, Reel	MC0805B223K500CT
CAP, MLCC, 220nF, 50V, X7R, 0805, Reel	MC0805B224K500CT
CAP, MLCC, 3.3nF, 50V, X7R, 0805, Reel	MC000593
CAP, MLCC, 33nF, 50V, X7R, 0805, Reel	MC0805B333J500CT
CAP, MLCC, 33nF, 50V, X7R, 0805, Reel	MC0805B333K500CT
CAP, MLCC, 330nF, 50V, X7R, 0805, Reel	MC0805B334K500CT
CAP, MLCC, 39nF, 50V, X7R, 0805, Reel	MC000597
CAP, MLCC, 470pF, 50V, X7R, 0805, Reel	MC000598
CAP, MLCC, 4.7nF, 50V, X7R, 0805, Reel	MC0805B472J500CT
CAP, MLCC, 4.7nF, 50V, X7R, 0805, Reel	MC000600
CAP, MLCC, 47nF, 50V, X7R, 0805, Reel	MC0805B473J500CT
CAP, MLCC, 47nF, 50V, X7R, 0805, Reel	MC000602
CAP, MLCC, 470nF, 50V, X7R, 0805, Reel	MC0805B474K500CT
CAP, MLCC, 6.8nF, 50V, X7R, 0805, Reel	MC000604
CAP, MLCC, 68nF, 50V, X7R, 0805, Reel	MC000605
CAP, MLCC, 10µF, 6.3V, X7R, 0805, Reel	MC0805B106K6R3CT
CAP, MLCC, 220nF, 16V, X7R, 0805, Reel	MC000611
CAP, MLCC, 330nF, 16V, X7R, 0805, Reel	MC0805B334K160CT
CAP, MLCC, 470nF, 16V, X7R, 0805, Reel	MC0805B474K160CT
CAP, MLCC, 1µF, 16V, X5R, 0805, Reel	MC0805X105K160CT
CAP, MLCC, 33nF, 100V, X7R, 1206, Reel	MC000644
CAP, MLCC, 470nF, 25V, X7R, 1206, Reel	MC000660
CAP, MLCC, 22nF, 50V, X7R, 1206, Reel	MC000684
CAP, MLCC, 220nF, 50V, X7R, 1206, Reel	MC000686
CAP, MLCC, 33nF, 50V, X7R, 1206, Reel	MC000688





Description	Part Number
CAP, MLCC, 220nF, 100V, X7R, 1210, Reel	MC000718
MLCC, 1206, X7R, 100V, 22nF	MCCA000487
MLCC, 1206, X7R, 100V, 33nF	MCCA000488
MLCC, 1206, X7R, 100V, 47nF	MCCA000489
MLCC, 1206, X7R, 100V, 100nF	MCCA000490
MLCC, 1210, Y5V, 6.3V, 47µF	MCCA000491
MLCC, 1210, Y5V, 50V, 10µF	MCCA000492
MLCC, 1210, X7R, 100V, 220nF	MCCA000493
MLCC, 1210, X7R, 100V, 470nF	MCCA000494
MLCC, 1210, X7R, 100V, 680nF	MCCA000495
MLCC, 0402, X5R, 6.3V, 0.22µF	MCCA000498
MLCC, 0402, X5R, 6.3V, 0.47µF	MCCA000499
MLCC, 0402, X5R, 6.3V, 1µF	MCCA000500
MLCC, 0402, X5R, 6.3V, 2.2µF	MCCA000501
MLCC, 0402, X5R, 10V, 0.056µF	MCCA000502
MLCC, 0402, X5R, 10V, 0.068µF	MCCA000503
MLCC, 0402, X5R, 10V, 0.082µF	MCCA000504
MLCC, 0402, X5R, 10V, 0.1µF	MCCA000505
MLCC, 0402, X5R, 10V, 1µF	MCCA000506
MLCC, 0402, X5R, 16V, 0.027µF	MCCA000507
MLCC, 0402, X5R, 16V, 0.033µF	MCCA000508
MLCC, 0402, X5R, 16V, 0.039µF	MCCA000509
MLCC, 0402, X5R, 16V, 0.047µF	MCCA000510
MLCC, 0402, X5R, 16V, 0.068µF	MCCA000511
MLCC, 0402, X5R, 16V, 0.1µF	MCCA000512
MLCC, 0402, X5R, 16V, 0.22µF	MCCA000513
MLCC, 0603, X5R, 6.3V, 0.82µF	MCCA000514
MLCC, 0603, X5R, 6.3V, 1µF	MCCA000515
MLCC, 0603, X5R, 6.3V, 2.2μF	MCCA000516
MLCC, 0603, X5R, 6.3V, 10µF	MCCA000517
MLCC, 0603, X5R, 10V, 0.33µF	MCCA000518
MLCC, 0603, X5R, 10V, 0.47μF	MCCA000519
MLCC, 0603, X5R, 10V, 0.68µF	MCCA000520
MLCC, 0603, Y5V, 10V, 1μF	MCCA000521
MLCC, 0603, X5R, 10V, 1µF	MCCA000522
MLCC, 0603, Y5V, 10V, 2.2μF	MCCA000523
MLCC, 0603, X5R, 10V, 2.2μF	MCCA000524
MLCC, 0603, X5R, 16V, 0.22µF	MCCA000525
MLCC, 0603, X5R, 16V, 0.33μF	MCCA000526
MLCC, 0603, X5R, 16V, 0.47μF	MCCA000527
MLCC, 0603, X5R, 16V, 0.68μF	MCCA000528
MLCC, 0603, X5R, 16V, 1µF	MCCA000529

Description	Part Number
MLCC, 0603, Y5V, 16V, 1µF	MCCA000530
MLCC, 0603, X5R, 25V, 1µF	MCCA000531
MLCC, 0805, X5R, 6.3V, 1.5µF	MCCA000532
MLCC, 0805, X5R, 6.3V, 2.2µF	MCCA000533
MLCC, 0805, X5R, 6.3V, 3.3µF	MCCA000534
MLCC, 0805, X5R, 6.3V, 4.7μF	MCCA000535
MLCC, 0805, X5R, 6.3V, 22µF	MCCA000536
MLCC, 0805, X5R, 10V, 2.2µF	MCCA000537
MLCC, 0805, Y5V, 10V, 3.3µF	MCCA000538
MLCC, 0805, X5R, 10V, 3.3µF	MCCA000539
MLCC, 0805, Y5V, 10V, 4.7µF	MCCA000540
MLCC, 0805, X5R, 10V, 4.7µF	MCCA000541
MLCC, 0805, Y5V, 10V, 10µF	MCCA000542
MLCC, 0805, Y5V, 16V, 1µF	MCCA000543
MLCC, 0805, Y5V, 16V, 1.5µF	MCCA000544
MLCC, 0805, Y5V, 16V, 2.2µF	MCCA000545
MLCC, 0805, X5R, 16V, 2.2µF	MCCA000546
MLCC, 0805, Y5V, 16V, 4.7μF	MCCA000547
MLCC, 0805, X5R, 16V, 4.7μF	MCCA000548
MLCC, 0805, Y5V, 25V, 1µF	MCCA000549
MLCC, 0805, X5R, 25V, 2.2µF	MCCA000550
MLCC, 0805, X5R, 25V, 4.7μF	MCCA000551
MLCC, 0805, Y5V, 50V, 1µF	MCCA000552
MLCC, 1206, X7R, 10V, 1.5µF	MCCA000553
MLCC, 1206, Y5V, 10V, 10μF	MCCA000554
MLCC, 1206, Y5V, 10V, 22µF	MCCA000555
CAP, MLCC, 22nF, 100V, X7R, 1206, Reel	MC000641
MLCC, 1210, Y5V, 50V, 4.7μF	MCCA000587
MLCC, 1812, X7R, 100V, 1µF	MCCA000589
MLCC, 0805, NP0, 200V, 15pF	MCCA000606
MLCC, 0805, NP0, 200V, 22pF	MCCA000607
MLCC, 0805, NP0, 200V, 33pF	MCCA000608
MLCC, 0805, NP0, 200V, 47pF	MCCA000609
MLCC, 0805, NP0, 200V, 68pF	MCCA000610
MLCC, 0805, NP0, 200V, 100pF	MCCA000611
MLCC, 0805, NP0, 200V, 150pF	MCCA000612
MLCC, 0805, X7R, 200V, 220pF	MCCA000613
MLCC, 0805, NP0, 200V, 220pF	MCCA000614
MLCC, 0805, X7R, 200V, 330pF	MCCA000615
MLCC, 0805, NP0, 200V, 330pF	MCCA000616
MLCC, 0805, X7R, 200V, 470pF	MCCA000617
MLCC, 0805, X7R, 200V, 680pF	MCCA000618





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Description	Part Number
MLCC, 0805, X7R, 200V, 1nF	MCCA000619
MLCC, 0805, X7R, 200V, 1.5nF	MCCA000620
MLCC, 0805, X7R, 200V, 2.2nF	MCCA000621
MLCC, 0805, X7R, 200V, 3.3nF	MCCA000622
MLCC, 0805, X7R, 200V, 4.7nF	MCCA000623
MLCC, 0805, X7R, 200V, 6.8nF	MCCA000624
MLCC, 0805, X7R, 200V, 10nF	MCCA000625
MLCC, 1206, NP0, 200V, 1nF	MCCA000626
MLCC, 1206, X7R, 200V, 15nF	MCCA000627
MLCC, 1206, X7R, 200V, 22nF	MCCA000628
MLCC, 1206, X7R, 630V, 1nF	MCCA000630
MLCC, 1206, X7R, 630V, 2.2nF	MCCA000631
MLCC, 1206, X7R, 630V, 4.7nF	MCCA000632
MLCC, 1206, X7R, 630V, 10nF	MCCA000633
Capacitor, 0603, NP0, 200V, 1.0pF	MCCA000634
Capacitor, 0603, NP0, 200V, 1.5pF	MCCA000635
Capacitor, 0603, NP0, 200V, 2.2pF	MCCA000636
Capacitor, 0603, NP0, 200V, 3.3pF	MCCA000637
Capacitor, 0603, NP0, 200V, 4.7pF	MCCA000638
Capacitor, 0603, NP0, 200V, 6.8pF	MCCA000639
Capacitor, 0603, NP0, 200V, 10pF	MCCA000640
Capacitor, 0603, NP0, 200V, 15pF	MCCA000641
Capacitor, 0603, NP0, 200V, 22pF	MCCA000642

Description	Part Number
Capacitor, 0603, NP0, 200V, 33pF	MCCA000643
Capacitor, 0603, NP0, 200V, 47pF	MCCA000644
Capacitor, 0603, NP0, 200V, 68pF	MCCA000645
Capacitor, 0603, NP0, 200V, 100pF	MCCA000646
Capacitor, 0603, NP0, 200V, 150pF	MCCA000647
Capacitor, 0603, NP0, 200V, 220pF	MCCA000648
Capacitor, 0805, NP0, 200V, 1.0pF	MCCA000649
Capacitor, 0805, NP0, 200V, 1.5pF	MCCA000650
Capacitor, 0805, NP0, 200V, 2.2pF	MCCA000651
Capacitor, 0805, NP0, 200V, 3.3pF	MCCA000652
Capacitor, 0805, NP0, 200V, 4.7pF	MCCA000653
Capacitor, 0805, NP0, 200V, 6.8pF	MCCA000654
Capacitor, 0805, NP0, 200V, 10pF	MCCA000655
Capacitor, 0805, NP0, 500V, 1.0pF	MCCA000656
Capacitor, 0805, NP0, 500V, 1.5pF	MCCA000657
Capacitor, 0805, NP0, 500V, 2.2pF	MCCA000658
Capacitor, 0805, NP0, 500V, 3.3pF	MCCA000659
Capacitor, 0805, NP0, 500V, 4.7pF	MCCA000660
Capacitor, 0805, NP0, 500V, 6.8pF	MCCA000661
Capacitor, 0805, NP0, 500V, 10pF	MCCA000662
Capacitor, 0805, NP0, 500V, 15pF	MCCA000663
CAP, MLCC, 100pF, 50V, NP0, 0402, Reel	MC000371
CAP, MLCC, 100nF, 100V, X7R, 1206, Reel	MC000638

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