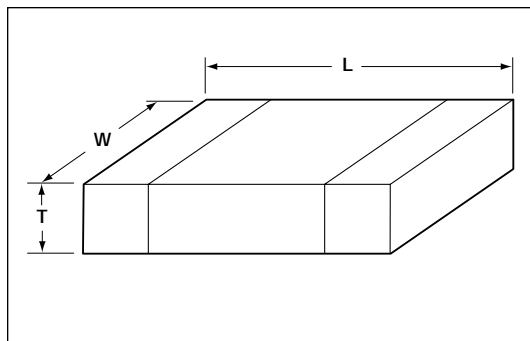


# Multilayer Ceramic Chip Capacitor

## Standard EIA Sizes



### HOW TO ORDER

**0603 5 A 271 J A T 2 A**

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- ① **Size:** 0402, 0603, 0805, 1206, 1210, 1812, 1825
- ② **Voltage:** 10V=Z, 16V=Y, 25V=3, 50V=5, 100V=1, 200V=2
- ③ **Dielectric:** NP0=A, X7R=C, Z5U=E, Y5V=G
- ④ **Capacitance Code**
- ⑤ **Tolerance:**  
F=±1% (≥50pF), G=±2% (≥25pF), J=±5%  
K=±10%, M=±20%, Z=+80, -20%
- ⑥ **Failure Rate:** A = Standard
- ⑦ **Termination:**  
T = Plated Ni and Solder
- ⑧ **Packaging:**  
2 = 7" Reel/unmarked  
4 = 13" Reel/unmarked
- ⑨ **Special Code:**  
A = Standard Product

### Dimensions: millimeters (inches)

	L	W	T
<b>0402</b>	1.0±0.1 (0.039±0.004)	0.5±0.1 (0.020±0.004)	0.6 max. (0.024 max.)
<b>0603</b>	1.6±0.15 (0.063±0.006)	0.8±0.15 (0.031±0.006)	0.9 max. (0.035 max.)
<b>0805</b>	2.0±0.2 (0.079±0.008)	1.25±0.2 (0.049±0.008)	1.3 max. (0.051 max.)
<b>1206</b>	3.2±0.2 (0.126±0.008)	1.6±0.2 (0.063±0.008)	1.5 max. (0.059 max.)
<b>1210</b>	3.2±0.2 (0.126±0.008)	2.5±0.2 (0.098±0.008)	1.7 max. (0.067 max.)
<b>1812</b>	4.5±0.3 (0.177±0.012)	3.2±0.2 (0.126±0.008)	1.7 max. (0.067 max.)
<b>1825</b>	4.5±0.3 (0.177±0.012)	6.4±0.4 (0.252±0.016)	1.7 max. (0.067 max.)

### Standard Packaging

	BULK	TAPE & REEL	
		7"	13"
<b>0402</b>	50,000	10,000	N/A
<b>0603</b>	15,000	4,000	10,000
<b>0805</b>	10,000 (T=0.6mm) 5,000 (T=1.25mm)	4,000	10,000
<b>1206</b>	N/A	4,000	10,000
<b>1210</b>	N/A	4,000	10,000

### Capacitance Range

Type		NP0				X7R				Z5U		Y5V					
		25V	50V	100V	200V	10V	16V	25V	50V	100V	200V	25V	50V	10V	16V	25V	50V
<b>0402</b>	Min.	0.5pF	0.5pF	—	—	—	100pF	100pF	100pF	—	—	—	—	2200pF	2200pF	2200pF	2200pF
	Max.	220pF	120pF	—	—	—	.047μF	6800pF	3900pF	—	—	—	—	0.1μF	.1μF	.022μF	0.01μF
<b>0603</b>	Min.	0.5pF	0.5pF	0.5pF	—	100pF	100pF	100pF	100pF	100pF	—	.01μF	.01μF	2200pF	2200pF	2200pF	2200pF
	Max.	1000pF	1000pF	330pF	—	.22μF	0.1μF	.047μF	.015μF	4700pF	—	.047μF	.027μF	1.0μF	.33μF	.22μF	.056μF
<b>0805</b>	Min.	0.5pF	0.5pF	0.5pF	0.5pF	100pF	100pF	100pF	100pF	100pF	220pF	.01μF	.01μF	.01pF	.01μF	.01μF	.01μF
	Max.	4700pF	2200pF	1000pF	470pF	2.2μF	.47μF	.22μF	.1μF	.022μF	1500pF	.12μF	.1μF	4.7μF	2.2μF	1.0μF	.33μF
<b>1206</b>	Min.	0.5pF	0.5pF	0.5pF	0.5pF	1000pF	1000pF	1000pF	1000pF	1000pF	330pF	.01μF	.01μF	.01μF	.01μF	.01μF	.01μF
	Max.	.01μF	4700pF	2200pF	1000pF	4.7μF	1.0μF	1.0μF	.22μF	0.1μF	5600pF	.33μF	.33μF	10.0μF	4.7μF	2.2μF	1.0μF
<b>1210</b>	Min.	560pF	560pF	560pF	560pF	—	1000pF	1000pF	1000pF	1000pF	470pF	.01μF	.01μF	.1μF	.1μF	.1μF	.1μF
	Max.	.01μF	.01μF	3900pF	1500pF	—	4.7μF	2.2μF	.22μF	.1μF	8200pF	.56μF	.47μF	22μF	10μF	4.7μF	1.0μF
<b>1812</b>	Min.	1000pF	1000pF	1000pF	1000pF	—	—	—	.01μF	.01μF	—	.01μF	.01pF	—	—	.15μF	.15μF
	Max.	.015μF	.01μF	4700pF	3300pF	—	—	—	1.0μF	.47μF	—	1.0μF	1.0μF	—	—	1.5μF	1.5μF
<b>1825</b>	Min.	—	1000pF	1000pF	1000pF	—	—	—	.01pF	.01pF	—	.01μF	.01pF	—	—	.47μF	.47μF
	Max.	—	.022μF	.012μF	6800pF	—	—	—	1.0μF	.47μF	—	1.0μF	1.0μF	—	—	1.5μF	1.0μF

For maximum capacitance - consult factory.

Additional information on this product is available from AVX's catalog or AVX's FAX Service. Call 1-800-879-1613 and request document #001. Visit our website <http://www.avxcorp.com>

