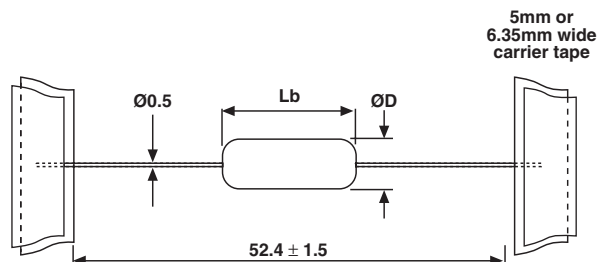


# Dipped Axial Multilayer Ceramic Capacitors

## DIMENSIONS



**RoHS**  
COMPLIANT

## CAPACITOR DIMENSIONS AND WEIGHT

| SIZE | Lb <sub>max</sub> <sup>(1)</sup> | ØD <sub>max</sub> <sup>(1)</sup> | WEIGHT (g) |
|------|----------------------------------|----------------------------------|------------|
| 15   | 3.8<br>(0.150)                   | 2.5<br>(0.100)                   | ≈ 0.14     |
| 20   | 5.0<br>(0.200)                   | 3.0<br>(0.120)                   | ≈ 0.15     |

### Note

1. Dimensions between the parentheses are in inches

## QUICK REFERENCE DATA

| DESCRIPTION              | VALUE          |       |                  |       |                  |       |
|--------------------------|----------------|-------|------------------|-------|------------------|-------|
| Capacitance range        | 10 to 5600 pF  |       | 100 pF to 1.0 µF |       | 0.1 µF to 1.0 µF |       |
| Rated DC voltage         | 50 V           | 100 V | 50 V             | 100 V | 50 V             | 100 V |
| Tolerance on capacitance | ± 5 % / ± 10 % |       | ± 10 % / ± 20 %  |       | + 80 / - 20 %    |       |
| Dielectric Code          | C0G (NP0)      |       | X7R              |       | Y5V              |       |

## ORDERING INFORMATION

| A                                               | 103                                                                                        | K                                                          | 15                                             | X7R               | F                                                 | 5                 | TAA                       |
|-------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------|------------------------------------------------|-------------------|---------------------------------------------------|-------------------|---------------------------|
| PRODUCT TYPE                                    | CAPACITANCE CODE                                                                           | CAP. TOLERANCE                                             | SIZE CODE                                      | TEMP. CHAR.       | RATED VOLTAGE                                     | LEAD DIA.         | PACKAGING                 |
| A = Mono-Axial                                  | Two significant digits followed by the number of zeros.<br>For example:<br>473 = 47,000 pF | J = ± 5 %<br>K = ± 10 %<br>M = ± 20 %<br>Z = + 80 / - 20 % | 15 = 3.8 (0.15") max.<br>20 = 5.0 (0.20") max. | C0G<br>X7R<br>Y5V | F = 50 V <sub>DC</sub><br>H = 100 V <sub>DC</sub> | 5 = 0.5mm (0.20") | TAA = T & R<br>UAA = AMMO |
| <b>Ordering Example: A-103-K-15-X7R-F-5-TAA</b> |                                                                                            |                                                            |                                                |                   |                                                   |                   |                           |

**CAPACITANCE RANGE CHART  
C0G (NP0) DIELECTRIC**

| SIZE          |      | 15 |     | 20 |     |
|---------------|------|----|-----|----|-----|
| RATED VOLTAGE |      | 50 | 100 | 50 | 100 |
| VALUE         | CODE |    |     |    |     |
| 10 pF         | 100  |    |     |    |     |
| 12 pF         | 120  |    |     |    |     |
| 15 pF         | 150  |    |     |    |     |
| 18 pF         | 180  |    |     |    |     |
| 22 pF         | 220  |    |     |    |     |
| 27 pF         | 270  |    |     |    |     |
| 33 pF         | 330  |    |     |    |     |
| 39 pF         | 390  |    |     |    |     |
| 47 pF         | 470  |    |     |    |     |
| 56 pF         | 560  |    |     |    |     |
| 68 pF         | 680  |    |     |    |     |
| 82 pF         | 820  |    |     |    |     |
| 100 pF        | 101  |    |     |    |     |
| 120 pF        | 121  |    |     |    |     |
| 150 pF        | 151  |    |     |    |     |
| 180 pF        | 181  |    |     |    |     |
| 220 pF        | 221  |    |     |    |     |
| 270 pF        | 271  |    |     |    |     |
| 330 pF        | 331  |    |     |    |     |
| 390 pF        | 391  |    |     |    |     |
| 470 pF        | 471  |    |     |    |     |
| 560 pF        | 561  |    |     |    |     |
| 680 pF        | 681  |    |     |    |     |
| 820 pF        | 821  |    |     |    |     |
| 1000 pF       | 102  |    |     |    |     |
| 1200 pF       | 122  |    |     |    |     |
| 1500 pF       | 152  |    |     |    |     |
| 1800 pF       | 182  |    |     |    |     |
| 2200 pF       | 222  |    |     |    |     |
| 2700 pF       | 272  |    |     |    |     |
| 3300 pF       | 332  |    |     |    |     |
| 3900 pF       | 392  |    |     |    |     |
| 4700 pF       | 472  |    |     |    |     |
| 5600 pF       | 562  |    |     |    |     |

**Y5V DIELECTRIC**

| SIZE          |      | 15 |     | 20 |     |
|---------------|------|----|-----|----|-----|
| RATED VOLTAGE |      | 50 | 100 | 50 | 100 |
| VALUE         | CODE |    |     |    |     |
| 0.01 $\mu$ F  | 103  |    |     |    |     |
| 0.015 $\mu$ F | 153  |    |     |    |     |
| 0.022 $\mu$ F | 223  |    |     |    |     |
| 0.033 $\mu$ F | 333  |    |     |    |     |
| 0.047 $\mu$ F | 473  |    |     |    |     |
| 0.068 $\mu$ F | 683  |    |     |    |     |
| 0.10 $\mu$ F  | 104  |    |     |    |     |
| 0.15 $\mu$ F  | 154  |    |     |    |     |
| 0.22 $\mu$ F  | 224  |    |     |    |     |
| 0.33 $\mu$ F  | 334  |    |     |    |     |
| 0.47 $\mu$ F  | 474  |    |     |    |     |
| 0.68 $\mu$ F  | 684  |    |     |    |     |
| 1.0 $\mu$ F   | 105  |    |     |    |     |

**X7R DIELECTRIC**

| SIZE          |      | 15 |     | 20 |     |
|---------------|------|----|-----|----|-----|
| RATED VOLTAGE |      | 50 | 100 | 50 | 100 |
| VALUE         | CODE |    |     |    |     |
| 100 pF        | 101  |    |     |    |     |
| 120 pF        | 121  |    |     |    |     |
| 150 pF        | 151  |    |     |    |     |
| 180 pF        | 181  |    |     |    |     |
| 220 pF        | 221  |    |     |    |     |
| 270 pF        | 271  |    |     |    |     |
| 330 pF        | 331  |    |     |    |     |
| 390 pF        | 391  |    |     |    |     |
| 470 pF        | 471  |    |     |    |     |
| 560 pF        | 561  |    |     |    |     |
| 680 pF        | 681  |    |     |    |     |
| 820 pF        | 821  |    |     |    |     |
| 1000 pF       | 102  |    |     |    |     |
| 1200 pF       | 122  |    |     |    |     |
| 1500 pF       | 152  |    |     |    |     |
| 1800 pF       | 182  |    |     |    |     |
| 2200 pF       | 222  |    |     |    |     |
| 2700 pF       | 272  |    |     |    |     |
| 3300 pF       | 332  |    |     |    |     |
| 3900 pF       | 392  |    |     |    |     |
| 4700 pF       | 472  |    |     |    |     |
| 5600 pF       | 562  |    |     |    |     |
| 6800 pF       | 682  |    |     |    |     |
| 8200 pF       | 822  |    |     |    |     |
| 0.01 $\mu$ F  | 103  |    |     |    |     |
| 0.012 $\mu$ F | 123  |    |     |    |     |
| 0.015 $\mu$ F | 153  |    |     |    |     |
| 0.018 $\mu$ F | 183  |    |     |    |     |
| 0.022 $\mu$ F | 223  |    |     |    |     |
| 0.027 $\mu$ F | 273  |    |     |    |     |
| 0.033 $\mu$ F | 333  |    |     |    |     |
| 0.039 $\mu$ F | 393  |    |     |    |     |
| 0.047 $\mu$ F | 473  |    |     |    |     |
| 0.056 $\mu$ F | 563  |    |     |    |     |
| 0.068 $\mu$ F | 683  |    |     |    |     |
| 0.082 $\mu$ F | 823  |    |     |    |     |
| 0.10 $\mu$ F  | 104  |    |     |    |     |
| 0.12 $\mu$ F  | 124  |    |     |    |     |
| 0.15 $\mu$ F  | 154  |    |     |    |     |
| 0.22 $\mu$ F  | 224  |    |     |    |     |
| 0.33 $\mu$ F  | 334  |    |     |    |     |
| 0.47 $\mu$ F  | 474  |    |     |    |     |
| 0.68 $\mu$ F  | 684  |    |     |    |     |
| 1.0 $\mu$ F   | 105  |    |     |    |     |



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