

# Radial & Axial

## TYPE DESIGNATION (HOW TO ORDER)

CR 051B X7R 104 K 500 F  
CA 2633 Y5V 104 Z 500 F

### CAPACITANCE CODE

THIS IS EXPRESSED IN PICO FARADS THE FIRST DIGITS ARE SIGNIFICANT FIGURES. THE THIRD IS THE NUMBER OF ZEROS.

### EIA TEMPERATURE CHARACTERISTICS

| EIA Characteristic | Temperature Range | Maximum Capacitance Change Over Temperature Range |
|--------------------|-------------------|---------------------------------------------------|
| Z5U                | +10°C to +85°C    | -56% +22%                                         |
| X7R                | -55°C to +125°C   | ±15%                                              |
| COG                | -55°C to +125°C   | 0 ±30ppm/°C                                       |
| Y5V                | -30°C to +85°C    | -82% +22%                                         |

### TOLERANCE CODE

G = ±2 %

J = ±5 %

K = ±10 %

M = ±20 %

Z = +80 ~ -20 %

\*For capacitance values Below 10 pF only.

### VOLTAGE RATING.

THE D.C WORKING VOLTAGE RATING AT MAXIMUM OPERATING TEMPERATURE THE FIRST TWO DIGITS ARE SIGNIFICANT FIGURES, THE THIRD IS THE NUMBER OF ZEROS

### TYPE CODE

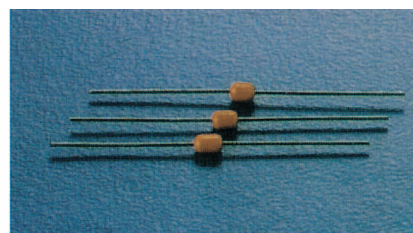
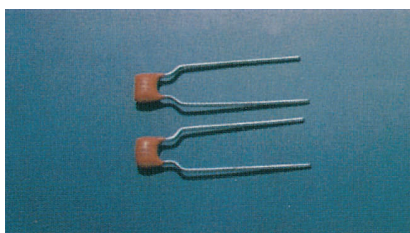
SEE DIMENSIONS.

### PACKING CODE

B-BULK PACK

R-REEL PACK

F-FLAT PACK



## DIMENSIONS BY TYPE

(Unit:mm)

| RADIAL |     |         |         |         |         |     | AXIAL  |          |         |          |     |
|--------|-----|---------|---------|---------|---------|-----|--------|----------|---------|----------|-----|
| TYPE   | P   | H (max) | L (max) | W (max) | T (max) | φ d | TYPE   | L (±0.3) | D (max) | LI (max) | φ d |
| CR051B | 5.0 | 6.4     | 5.1     | 5.1     | 3.2     | 0.5 | CA2633 | 3.3      | 2.6     | 25       | 0.5 |
|        |     |         |         |         |         |     |        |          |         |          |     |

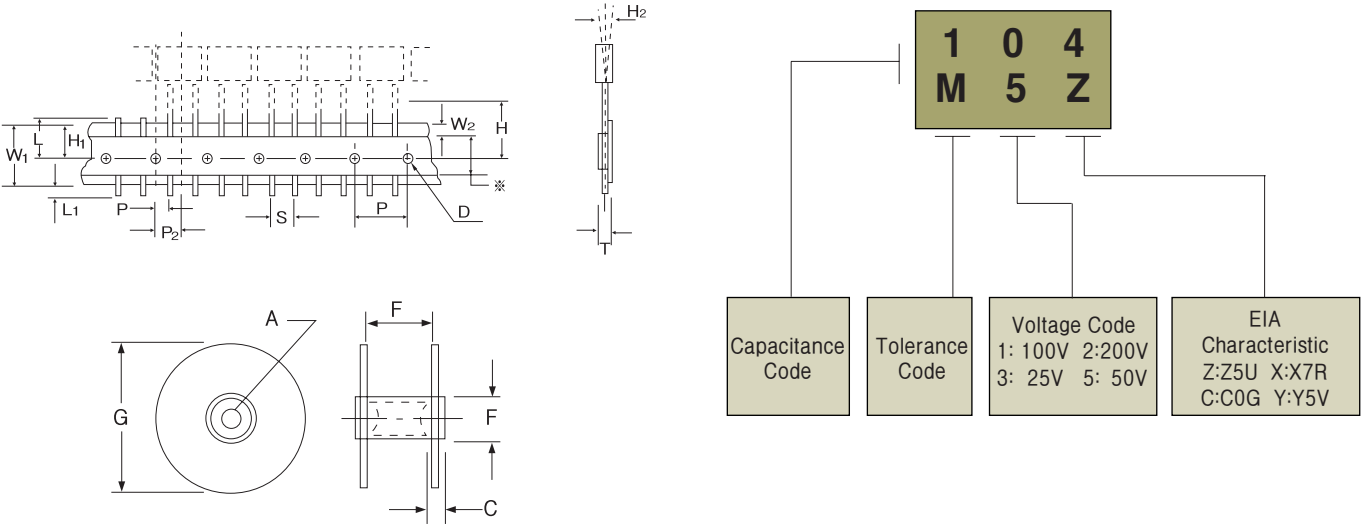
# Radial & Axial

## CAPACITANCE RANGE TYPE

| CAPACITANCE VALUE \ TYPE |     | RADIAL |     |     |     | AXIAL  |     |     |     |
|--------------------------|-----|--------|-----|-----|-----|--------|-----|-----|-----|
|                          |     | CR051  |     |     |     | CA2633 |     |     |     |
|                          |     | C0G    | X7R | Z5U | Y5V | C0G    | X7R | Z5U | Y5V |
| 1 pF                     | 010 | 010    |     |     |     |        |     |     |     |
| 2                        | 020 |        |     |     |     |        |     |     |     |
| 3                        | 030 |        |     |     |     |        |     |     |     |
| 4                        | 040 |        |     |     |     |        |     |     |     |
| 5                        | 050 |        |     |     |     |        |     |     |     |
| 6                        | 060 |        |     |     |     |        |     |     |     |
| 7                        | 070 |        |     |     |     |        |     |     |     |
| 8                        | 080 |        |     |     |     |        |     |     |     |
| 9                        | 090 |        |     |     |     |        |     |     |     |
| 10                       | 100 |        |     |     |     |        |     |     |     |
| 12                       | 120 |        |     |     |     |        |     |     |     |
| 15                       | 150 |        |     |     |     |        |     |     |     |
| 16                       | 160 |        |     |     |     |        |     |     |     |
| 18                       | 180 |        |     |     |     |        |     |     |     |
| 20                       | 200 |        |     |     |     |        |     |     |     |
| 22                       | 220 |        |     |     |     | 220    |     |     |     |
| 24                       | 240 |        |     |     |     |        |     |     |     |
| 27                       | 270 |        |     |     |     |        |     |     |     |
| 30                       | 300 |        |     |     |     |        |     |     |     |
| 33                       | 330 |        |     |     |     |        |     |     |     |
| 36                       | 360 |        |     |     |     |        |     |     |     |
| 39                       | 390 |        |     |     |     |        |     |     |     |
| 43                       | 430 |        |     |     |     |        |     |     |     |
| 47                       | 470 |        |     |     |     |        |     |     |     |
| 51                       | 510 |        |     |     |     |        |     |     |     |
| 56                       | 560 |        |     |     |     |        |     |     |     |
| 62                       | 620 |        |     |     |     |        |     |     |     |
| 68                       | 680 |        |     |     |     |        |     |     |     |
| 75                       | 750 |        |     |     |     |        |     |     |     |
| 82                       | 820 |        |     |     |     |        |     |     |     |
| 91                       | 910 |        | 101 |     |     |        |     |     |     |
| 100                      | 101 |        |     |     |     |        |     |     |     |
| 120                      | 121 |        |     |     |     |        |     |     |     |
| 150                      | 151 |        |     |     |     |        |     |     |     |
| 180                      | 181 |        |     |     |     |        |     |     |     |
| 220                      | 221 |        |     |     |     |        |     |     |     |
| 270                      | 271 |        |     |     |     |        |     |     |     |
| 330                      | 331 |        |     |     |     |        |     |     |     |
| 390                      | 391 |        |     |     |     |        |     |     |     |
| 470                      | 471 |        |     |     |     |        |     |     |     |
| 560                      | 561 |        |     |     |     |        |     |     |     |
| 680                      | 681 |        |     |     |     |        |     |     |     |
| 820                      | 821 |        |     |     |     |        |     |     |     |
| 1000                     | 102 |        |     | 102 |     |        | 102 |     |     |
| 1200                     | 122 |        |     |     |     |        |     |     |     |
| 1500                     | 152 |        |     |     |     |        |     |     |     |
| 1800                     | 182 |        |     |     |     |        |     |     |     |
| 2200                     | 222 |        |     |     |     |        |     |     |     |
| 2700                     | 272 |        |     |     |     |        |     |     |     |
| 3300                     | 332 | 332    |     |     |     |        |     |     |     |
| 3900                     | 392 |        |     |     |     |        |     |     |     |
| 4700                     | 472 |        |     |     |     |        |     |     |     |
| 5600                     | 562 |        |     |     |     |        |     |     |     |
| 6800                     | 682 |        |     |     |     |        |     |     |     |
| 8200                     | 822 |        |     |     |     |        |     |     |     |
| 10 pF                    | 103 |        |     |     | 103 | 103    |     | 153 |     |
| 15                       | 153 |        |     |     |     |        |     |     |     |
| 22                       | 223 |        |     |     |     |        |     |     |     |
| 33                       | 333 |        |     |     |     |        |     |     |     |
| 47                       | 473 |        |     |     |     |        |     |     |     |
| 68                       | 683 |        |     |     |     |        |     |     |     |
| 100                      | 104 |        | 154 |     |     |        |     |     | 104 |
| 150                      | 154 |        |     |     |     |        |     |     |     |
| 220                      | 224 |        |     |     |     |        |     |     |     |
| 330                      | 334 |        |     |     |     |        |     |     |     |
| 470                      | 474 |        |     |     |     |        |     |     |     |
| 680                      | 684 |        |     | 474 | 474 |        |     | 474 |     |
| 1000                     | 105 |        |     |     |     |        |     |     | 105 |

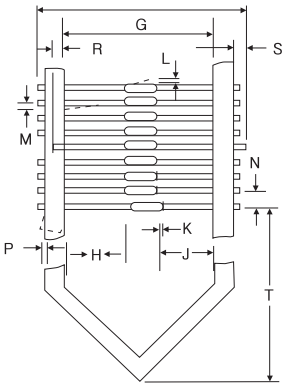
Radial & Axial

MARKING (PRINT ON THE ONE SIDE)



(Unit:mm)

| CODE | DIMENSIONS | TOLERANCE  | CODE | DIMENSIONS  | TOLERANCE    | CODE | DIMENSIONS                 | TOLERANCE    |
|------|------------|------------|------|-------------|--------------|------|----------------------------|--------------|
| D    | 4.0        | ±0.30      | P1   | 3.85        | ±0.7         | C    | 9.50                       | min          |
| H    | 16.00      | ±0.50      | P2   | 6.35        | ±1.30        | E    | 29.97-50.04                | within range |
| H1   | 9.0        | ±0.76-0.50 | T    | 0.9         | max          | F    | 34.89-102.00               | within range |
| H2   | 0.00       | ±2.00      | W1   | 18.00       | ±0.5         | G    | 76.20-358.14               | within range |
| L    | 11.00      | max        | W2   | 6.0         | ±0.5         | S    | 5.00                       | ±0.7         |
| L1   | 1.5        | max        | A    | 13.79-38.10 | within range | ※    | No adhesive may be exposed |              |
| P    | 12.70      | ±0.30      | B    | 28.57-86.00 | within range |      |                            |              |



(Unit:mm)

| CODE         | F          |      |
|--------------|------------|------|
| PACKING TYPE | 52         | 26   |
| DIMENSION    | 64.8       | 38.8 |
| TOLERANCE    | +2.0<br>-0 |      |

(Unit:mm)

| CODE | DIMENSIONS | TOLERANCE | CODE | DIMENSIONS | TOLERANCE |
|------|------------|-----------|------|------------|-----------|
| H    | =J         | ±1.20     | N    | 5.00       | ±0.40     |
| J    | =H         | ±1.20     | P    | 0.80       | max       |
| K    | 0.80       | max       | R    | 3.20       | min       |
| L    | 1.20       | max       | S    | 1.60       | max       |
| M    | 1.20       | max       | T    | 610.00     | min       |