

## Dielectric Resonator (CO-AXIAL)

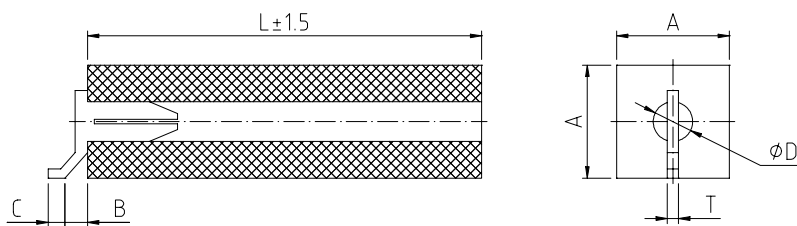
The DR series dielectric resonators (CO-AXIAL) have high dielectric constant, which designed for telecommunication equipment, featuring small size, high frequency, and high reliability, and suitable to Surface Mount technologies.

### DR Series

| ELECTRICAL CHARACTERISTICS |                     |                                    |                            |       |                       |          |                     |
|----------------------------|---------------------|------------------------------------|----------------------------|-------|-----------------------|----------|---------------------|
| Material Series            | Dielectric Constant | Frequency Stability of Temperature | Wave Length                | Model | Frequency Range (MHz) | Qu (min) | Frequency Tolerance |
| DR-90                      | 90 ± 2              | 0 ± 10                             | $\lambda/2$ or $\lambda/4$ | S10   | 300 ~ 700             | 600      | K/J                 |
|                            |                     |                                    |                            | S06   | 400 ~ 490             | 330      |                     |
|                            |                     |                                    |                            |       | 500 ~ 790             | 350      |                     |
|                            |                     |                                    |                            |       | 800 ~ 1290            | 400      |                     |
|                            |                     |                                    |                            |       | 1300 ~ 1690           | 470      |                     |
|                            |                     |                                    |                            |       | 1700 ~ 2200           | 510      |                     |
|                            |                     |                                    |                            | S05   | 500 ~ 590             | 270      |                     |
|                            |                     |                                    |                            |       | 600 ~ 1490            | 350      |                     |
|                            |                     |                                    |                            |       | 1500 ~ 2500           | 400      |                     |
|                            |                     |                                    |                            | S04   | 500~540               | 200      |                     |
|                            |                     |                                    |                            |       | 550~640               | 220      |                     |
|                            |                     |                                    |                            |       | 650~790               | 240      |                     |
|                            |                     |                                    |                            |       | 800~890               | 260      |                     |
|                            |                     |                                    |                            |       | 900~1490              | 270      |                     |
|                            |                     |                                    |                            |       | 1500~1790             | 290      |                     |
|                            |                     |                                    |                            |       | 1800~1890             | 340      |                     |
|                            |                     |                                    |                            |       | 1900~3000             | 370      |                     |
|                            |                     |                                    |                            | S03   | 900~1490              | 230      |                     |
|                            |                     |                                    |                            |       | 1500~1690             | 250      |                     |
|                            |                     |                                    |                            |       | 1700~1990             | 270      |                     |
|                            |                     |                                    |                            |       | 2000~3000             | 290      |                     |
|                            |                     |                                    |                            | S4x6  | 400~900               | 200      |                     |
|                            |                     |                                    |                            | S2x3  | 900~1590              | 170      |                     |
|                            |                     |                                    |                            |       | 1600~2590             | 200      |                     |
|                            |                     |                                    |                            |       | 2600~3000             | 260      |                     |
| DR-37                      | 37 ± 2              | 0 ± 10                             | $\lambda/2$ or $\lambda/4$ | S10   | 400~1200              | 650      | K/J                 |
|                            |                     |                                    |                            | S06   | 700~1540              | 450      |                     |
|                            |                     |                                    |                            |       | 1550~1800             | 550      |                     |
|                            |                     |                                    |                            | S04   | 1000~1900             | 360      |                     |
|                            |                     |                                    |                            |       | 2000~3000             | 400      |                     |
| DR-21                      | 21 ± 2              | 0 ± 10                             | $\lambda/2$ or $\lambda/4$ | S06   | 1000~1190             | 500      | K/J                 |
|                            |                     |                                    |                            |       | 1200~1790             | 600      |                     |
|                            |                     |                                    |                            |       | 1800~2490             | 650      |                     |
|                            |                     |                                    |                            |       | 2500~3000             | 850      |                     |
|                            |                     |                                    |                            | S04   | 1300~1490             | 350      |                     |
|                            |                     |                                    |                            |       | 1500~1990             | 400      |                     |
|                            |                     |                                    |                            |       | 2000~3000             | 450      |                     |
|                            |                     |                                    |                            | S03   | 1900~2490             | 380      |                     |
|                            |                     |                                    |                            |       | 2500~3000             | 400      |                     |

Note: Qu is the lowest value of frequency.

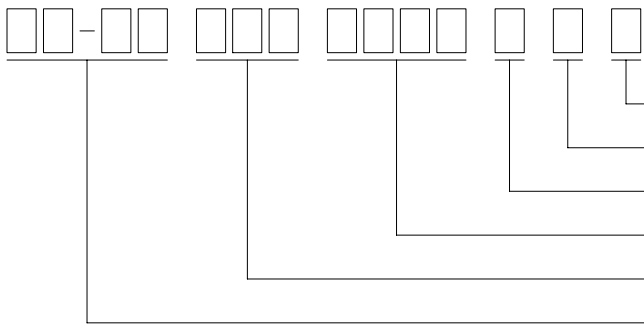
PACKAGE OUTLINE DIMENSIONS



| Code\Model | S10                   | S06 | S04 | S03 |
|------------|-----------------------|-----|-----|-----|
| A          | 10                    | 6   | 4   | 4   |
| T          | 1.0                   | 1.0 | 0.6 | 0.5 |
| B          | 2.0                   | 2.0 | 0.5 | 0.5 |
| C          | 1.5                   | 1.0 | 0.7 | 0.7 |
| D          | 3.1                   | 2.6 | 2.0 | 1.0 |
| L          | Varies with frequency |     |     |     |

Tolerance:  $\pm 0.3\text{mm}$   
Unit: mm

PART NUMBER BUILDER



Connector (T: with N: without)  
Frequency Tolerance (J:  $\pm 1.0\%$  K:  $\pm 0.5\%$ )  
Wave Length (2:  $\lambda/2$  4:  $\lambda/4$ )  
Frequency in MHz  
Model (S06:  $6 \times 6 \text{ mm}$ )  
Material Series