

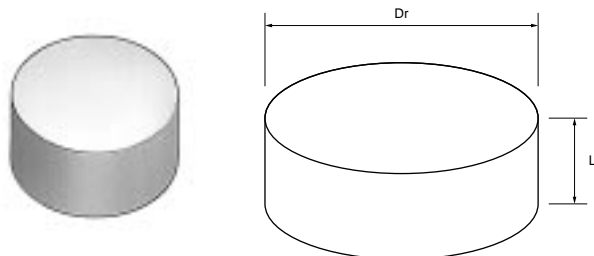
# Dielectric Resonators (RESOMICS®)



## Dielectric Resonator B Series (DRD Type)

### ■ Features

1. High Q of 18,000 at 10GHz
2. High dielectric constant :  $\epsilon_r=27.9$
3. Resonant frequency temperature coefficient can be chosen from 0 to 6ppm/(degree C). Tolerance of frequency temperature coefficient can be chosen from  $\pm 0.5$ ,  $\pm 1$  and  $\pm 2$ ppm/(degree C).
4. Resonant frequency can be chosen from 4.8 to 25.9GHz.



| Part Number       | Outer Dia. (mm) | Thickness (mm) | Frequency Range |
|-------------------|-----------------|----------------|-----------------|
| DRD0260115B□□□00T | 2.59 ±0.05 mm   | 1.15 ±0.05 mm  | 23.67~25.94 GHz |
| DRD0280125B□□□00T | 2.82 ±0.05 mm   | 1.25 ±0.05 mm  | 21.75~23.67 GHz |
| DRD0310136B□□□00T | 3.06 ±0.05 mm   | 1.36 ±0.05 mm  | 20.03~21.75 GHz |
| DRD0330148B□□□00T | 3.33 ±0.05 mm   | 1.48 ±0.05 mm  | 18.40~20.03 GHz |
| DRD0360161B□□□00T | 3.62 ±0.05 mm   | 1.61 ±0.05 mm  | 16.92~18.40 GHz |
| DRD0390176B□□□00T | 3.94 ±0.05 mm   | 1.76 ±0.05 mm  | 15.53~16.92 GHz |
| DRD0430191B□□□00T | 4.28 ±0.05 mm   | 1.91 ±0.05 mm  | 14.30~15.53 GHz |
| DRD0460206B□□□00T | 4.65 ±0.05 mm   | 2.06 ±0.05 mm  | 13.19~14.30 GHz |
| DRD0510224B□□□00T | 5.06 ±0.05 mm   | 2.24 ±0.05 mm  | 12.13~13.19 GHz |
| DRD0550244B□□□00T | 5.50 ±0.05 mm   | 2.44 ±0.05 mm  | 11.15~12.13 GHz |
| DRD0600265B□□□00T | 5.98 ±0.05 mm   | 2.65 ±0.05 mm  | 10.26~11.15 GHz |
| DRD0650288B□□□00T | 6.50 ±0.05 mm   | 2.88 ±0.05 mm  | 9.44~10.26 GHz  |
| DRD0710314B□□□00T | 7.07 ±0.05 mm   | 3.14 ±0.05 mm  | 8.67~9.44 GHz   |
| DRD0770341B□□□00T | 7.69 ±0.05 mm   | 3.41 ±0.05 mm  | 7.97~8.67 GHz   |
| DRD0840371B□□□00T | 8.36 ±0.05 mm   | 3.71 ±0.05 mm  | 7.33~7.97 GHz   |
| DRD0910403B□□□00T | 9.09 ±0.05 mm   | 4.03 ±0.05 mm  | 6.75~7.33 GHz   |
| DRD0990438B□□□00T | 9.88 ±0.05 mm   | 4.38 ±0.05 mm  | 6.21~6.75 GHz   |
| DRD1070477B□□□00T | 10.75 ±0.05 mm  | 4.77 ±0.05 mm  | 5.70~6.21 GHz   |
| DRD1170518B□□□00T | 11.68 ±0.05 mm  | 5.18 ±0.05 mm  | 5.25~5.70 GHz   |
| DRD1270563B□□□00T | 12.70 ±0.05 mm  | 5.63 ±0.05 mm  | 4.83~5.25 GHz   |

Codes for temperature coefficient of resonant frequency and the tolerance should be put into the three blank boxes of the above Part Numbers.

Please see "Part Numbering" (ex.)  $2.0 \pm 1.0 \text{ ppm}/^\circ\text{C} : 20\text{A}$ .

### ■ Freq. Temp. Coefficient, Dielectric Constant and Q

#### • B series

| Characteristic Code | Frequency Temperature Coefficient ( $\tau_f$ ) (ppm/ $^\circ\text{C}$ ) | Dielectric Constant ( $\epsilon_r$ ) | Q (at 10GHz) |
|---------------------|---|--------------------------------------|--------------|
| 00                  | 0   | 27.9±0.5                             | 15,000 min.  |
| 20                  | 2   |                                      |              |
| 40                  | 4   |                                      |              |
| 60                  | 6   |                                      |              |