Dielectric Resonators (RESOMICS®)

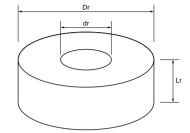


Dielectric Resonator U Series (DRT Type)

■ Features

- 1. High Q of 6,000 at 7GHz
- 2. High dielectric constant: Er=38
- 3. Resonant frequency temperature coefficient can be chosen from -4 to 10ppm/(degree C). Tolerance of the frequency temperature coefficient can be chosen from +-0.5, +-1, and +-2 ppm/(degree C).
- 4. Resonant frequency can be chosen from 2.7 to 11.5GHz.
- 5. Low price





| Part Number | Outer Dia. (mm) | Inner Dia. (mm) | Thickness (mm) | Frequency Range |
|-------------------|--------------------|--------------------|-------------------|-----------------|
| DRT0510224U□□□00T | 5.06 ±0.05 mm | 2.0 ±0.1 mm | 2.24 ±0.05 mm | 10.54~11.45 GHz |
| DRT0550244U□□□00T | 5.50 ±0.05 mm | 2.0 ±0.1 mm | 2.44 ±0.05 mm | 9.69~10.54 GHz |
| DRT0600265U□□□00T | 5.98 ±0.05 mm | 2.0 ±0.1 mm | 2.65 ±0.05 mm | 8.91~9.69 GHz |
| DRT0650288U□□□00T | 6.50 ±0.05 mm | 2.0 ±0.1 mm | 2.88 ±0.05 mm | 8.20~8.91 GHz |
| DRT0710314U□□□00T | 7.07 ±0.05 mm | 2.0 ±0.1 mm | 3.14 ±0.05 mm | 7.54~8.20 GHz |
| DRT0770341U□□□00T | 7.69 ±0.05 mm | 2.0 ±0.1 mm | 3.41 ±0.05 mm | 6.93~7.54 GHz |
| DRT0840371U□□□00T | 8.36 ±0.05 mm | 3.0 ±0.1 mm | 3.71 ±0.05 mm | 6.38~6.93 GHz |
| DRT0910403U□□□00T | 9.09 ±0.05 mm | 3.0 ±0.1 mm | 4.03 ±0.05 mm | 5.87~6.38 GHz |
| DRT0990438U□□□00T | 9.88 ±0.05 mm | 3.0 ±0.1 mm | 4.38 ±0.05 mm | 5.40~5.87 GHz |
| DRT1050460U□□□00T | 10.50 ±0.05 mm | 3.0 ±0.1 mm | 4.60 ±0.05 mm | 5.08~5.40 GHz |
| DRT1070477U□□□00T | 10.75 ±0.05 mm | 4.0 ±0.1 mm | 4.77 ±0.05 mm | 4.96~5.08 GHz |
| DRT1170518U□□□00T | 11.68 ±0.05 mm | 4.0 ±0.1 mm | 5.18 ±0.05 mm | 4.56~4.96 GHz |
| DRT1270563U□□□00T | 12.70 ±0.05 mm | 4.0 ±0.1 mm | 5.63 ±0.05 mm | 4.20~4.56 GHz |
| DRT1380613U□□□00T | 13.81 ±0.05 mm | 4.0 ±0.1 mm | 6.13 ±0.05 mm | 3.86~4.20 GHz |
| DRT1500666U□□□00T | 15.02 ±0.05 mm | 4.0 ±0.1 mm | 6.66 ±0.05 mm | 3.55~3.86 GHz |
| DRT1630724U□□□00T | 16.33 ±0.05 mm | 4.0 ±0.1 mm | 7.24 ±0.05 mm | 3.27~3.55 GHz |
| DRT1780788U□□□00T | 17.76 ±0.05 mm | 4.0 ±0.1 mm | 7.88 ±0.05 mm | 3.00~3.27 GHz |
| DRT1930856U□□□00T | 19.31 ±0.05 mm | 4.0 ±0.1 mm | 8.56 ±0.05 mm | 2.76~3.00 GHz |
| DRT2000863U□□□00T | 20.00 ±0.05 mm | 4.0 ±0.1 mm | 8.63 ±0.05 mm | 2.67~2.89 GHz |
| DRT2000863U□□□01T | 20.00 ±0.05 mm | 6.0 ±0.1 mm | 8.63 ±0.05 mm | 2.66~2.88 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±1.0ppm/°C : 20A.

■ Freq. Temp. Coefficient, Dielectric Constant and Q

U series

| • O Series | | | | | |
|---------------------|---|--------------------------------|----------------|--|--|
| Characteristic Code | Frequency Temperature Coefficient (τf) (ppm/°C) | Dielectric Constant (ɛr) | Q (at 7GHz) | | |
| E0 | -4 | 36.6±0.5 | | | |
| C0 | -2 | 37.0±0.5 | | | |
| 00 | 0 | 37.4±0.5 | | | |
| 20 | 2 | 37.7±0.5 | 6.000 min. | | |
| 40 | 4 | 38.0±0.5 | 6,000 111111. | | |
| 60 | 6 | 38.3±0.5 | | | |
| 80 | 8 | 38.6±0.5 | | | |
| P0 | 10 | 38.9±0.5 | | | |

