

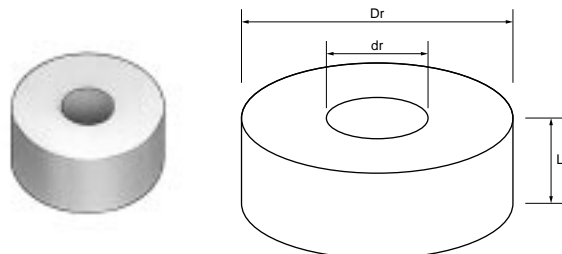
# Dielectric Resonators (RESOMICS®)

**muRata**

## Dielectric Resonator R Series (DRT Type)

### ■ Features

1. High Q of 15,000 at 10GHz
2. High dielectric constant :  $\epsilon_r=30$
3. Resonant frequency temperature coefficient can be chosen from 0 to 6ppm/(degree C). Tolerance of the 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 5.7 to 13.1GHz.



Part Number	Outer Dia. (mm)	Inner Dia. (mm)	Thickness (mm)	Frequency Range
<b>DRT0510224R□□□00T</b>	5.06 $\pm$ 0.05 mm	2.0 $\pm$ 0.1 mm	2.24 $\pm$ 0.05 mm	11.9~13.1 GHz
<b>DRT0550244R□□□00T</b>	5.50 $\pm$ 0.05 mm	2.0 $\pm$ 0.1 mm	2.44 $\pm$ 0.05 mm	11.0~11.9 GHz
<b>DRT0600265R□□□00T</b>	5.98 $\pm$ 0.05 mm	2.0 $\pm$ 0.1 mm	2.65 $\pm$ 0.05 mm	10.0~11.0 GHz
<b>DRT0650288R□□□00T</b>	6.50 $\pm$ 0.05 mm	2.0 $\pm$ 0.1 mm	2.88 $\pm$ 0.05 mm	9.1~10.0 GHz
<b>DRT0710314R□□□00T</b>	7.07 $\pm$ 0.05 mm	2.0 $\pm$ 0.1 mm	3.14 $\pm$ 0.05 mm	8.4~9.1 GHz
<b>DRT0770341R□□□00T</b>	7.69 $\pm$ 0.05 mm	2.0 $\pm$ 0.1 mm	3.41 $\pm$ 0.05 mm	7.7~8.4 GHz
<b>DRT0840371R□□□00T</b>	8.36 $\pm$ 0.05 mm	3.0 $\pm$ 0.1 mm	3.71 $\pm$ 0.05 mm	7.1~7.7 GHz
<b>DRT0910403R□□□00T</b>	9.09 $\pm$ 0.05 mm	3.0 $\pm$ 0.1 mm	4.03 $\pm$ 0.05 mm	6.5~7.1 GHz
<b>DRT0990438R□□□00T</b>	9.88 $\pm$ 0.05 mm	3.0 $\pm$ 0.1 mm	4.38 $\pm$ 0.05 mm	6.0~6.5 GHz
<b>DRT1050460R□□□00T</b>	10.50 $\pm$ 0.05 mm	3.0 $\pm$ 0.1 mm	4.60 $\pm$ 0.05 mm	5.7~6.0 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 $\pm$ 1.0ppm/°C : 20A.

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

#### • R series

Characteristic Code	Frequency Temperature Coefficient ( $\tau_f$ ) (ppm/°C)	Dielectric Constant ( $\epsilon_r$ )	Q (at 10GHz)
<b>00</b>	0	29.7 $\pm$ 0.8	12,000 min.
<b>20</b>	2	30.3 $\pm$ 0.8	
<b>40</b>	4	30.9 $\pm$ 0.8	
<b>60</b>	6	31.5 $\pm$ 0.8	