

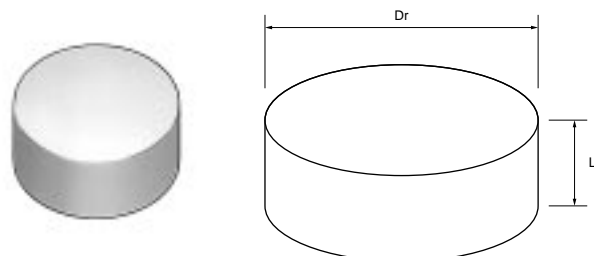
Dielectric Resonators (RESOMICS®)



Dielectric Resonator F Series (DRD Type)

■ Features

1. High Q of 35,000 at 10GHz
2. High dielectric constant : $\epsilon_r=24$
3. Resonant frequency temperature coefficient can be chosen from 0 to 4ppm/(degree C). Tolerance of frequency temperature coefficient can be chosen from ± 1 , ± 2 ppm/(degree C).
4. Resonant frequency can be chosen from 10.0 to 25.2GHz.
5. F series is also fit for applications above 25GHz.
Please consult us.



Part Number	Outer Dia. (mm)	Thickness (mm)	Frequency Range
DRD0280125F□□□00T	2.82 ±0.05 mm	1.25 ±0.05 mm	23.17~25.15 GHz
DRD0310136F□□□00T	3.06 ±0.05 mm	1.36 ±0.05 mm	21.27~23.17 GHz
DRD0330148F□□□00T	3.33 ±0.05 mm	1.48 ±0.05 mm	19.48~21.27 GHz
DRD0360161F□□□00T	3.62 ±0.05 mm	1.61 ±0.05 mm	17.93~19.48 GHz
DRD0390176F□□□00T	3.94 ±0.05 mm	1.76 ±0.05 mm	16.47~17.93 GHz
DRD0430191F□□□00T	4.28 ±0.05 mm	1.91 ±0.05 mm	15.16~16.47 GHz
DRD0460206F□□□00T	4.65 ±0.05 mm	2.06 ±0.05 mm	13.95~15.16 GHz
DRD0510224F□□□00T	5.06 ±0.05 mm	2.24 ±0.05 mm	12.82~13.95 GHz
DRD0550244F□□□00T	5.50 ±0.05 mm	2.44 ±0.05 mm	11.80~12.82 GHz
DRD0600265F□□□00T	5.98 ±0.05 mm	2.65 ±0.05 mm	10.85~11.80 GHz
DRD0650288F□□□00T	6.50 ±0.05 mm	2.88 ±0.05 mm	9.98~10.85 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 and Dielectric Constant

• F series

Characteristic Code	Frequency Temperature Coefficient (τ_f) (ppm/ $^\circ\text{C}$)	Dielectric Constant (ϵ_r)
00	0	23.8±0.5
10	1	23.9±0.5
20	2	24.0±0.5
30	3	24.1±0.5
40	4	24.2±0.5

■ Unloaded Q Specifications (DRD Type)

Part Number	Unloaded Q (min.)				
	$\tau_f=0$	$\tau_f=1$	$\tau_f=2$	$\tau_f=3$	$\tau_f=4$
DRD0280125F□□□00T	11,000	11,200	11,500	11,700	12,000
DRD0310136F□□□00T	12,500	12,800	13,200	13,600	14,000
DRD0330148F□□□00T	14,000	14,200	14,500	14,700	15,000
DRD0360161F□□□00T	15,500	15,800	16,200	16,600	17,000
DRD0390176F□□□00T	17,000	17,200	17,500	17,700	18,000
DRD0430191F□□□00T	18,000	18,200	18,500	18,700	19,000
DRD0460206F□□□00T	19,000	19,300	19,700	20,100	20,500
DRD0510224F□□□00T	20,000	20,300	20,700	21,100	21,500
DRD0550244F□□□00T	22,000	22,600	23,200	23,800	24,500
DRD0600265F□□□00T	23,500	24,100	24,700	25,300	26,000
DRD0620288F□□□00T	25,000	25,200	25,500	25,700	26,000