

CONFIGURATION

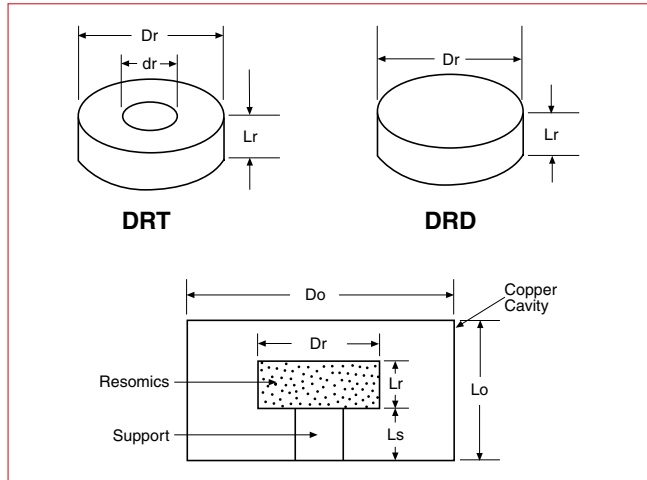


TABLE 1: Q & τ_f

Characteristic Code	Frequency Temperature Coefficient (τ_f) (ppm/°C)	Dielectric Constant (ϵ_r)	Unloaded Q (at 10GHz)
C	0	29.2 ± 0.5	12,000 min.
D	2	29.9 ± 0.5	
E	4	30.6 ± 0.5	
F	6	31.3 ± 0.5	

Q can be approximated by: $Q \geq \frac{120,000}{f_0}$
 $f_0 = [\text{GHz}]$

TABLE 2: τ_f TOLERANCE

Special Code	Tolerance of Frequency Temperature Coefficient (ppm/°C)
No Code	±2
A	±1
B	±0.5

GENERAL CHARACTERISTICS

- High unloaded Q — 12,000 min. @ 10GHz.
- High dielectric constant — $\epsilon_r \approx 30$.
- The resonant frequency temperature coefficient can be chosen from 0 to 6ppm/°C. Tolerance of the frequency temperature coefficient can be chosen ±0.5, ±1 and ±2ppm/°C.
- Dielectric resonators are chosen from the frequency range of 4.6 to 24.2GHz in disk type (DRD), and from the frequency range of 5.7 to 13.1GHz in cylindrical type (DRT).

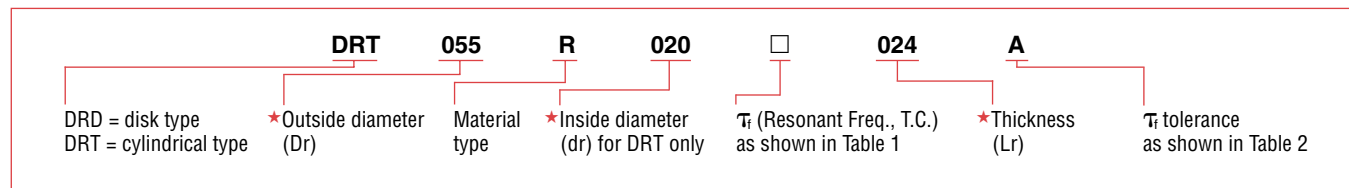
DIMENSIONS & FREQUENCY RANGE DRD TYPE

Part Number	Dr ± 0.05 (mm)	Lr ± 0.05 (mm)	Frequency Range (GHz)
DRD026R□012	2.59	1.15	22.1 to 24.2
DRD028R□013	2.82	1.25	20.4 to 22.1
DRD031R□014	3.06	1.36	18.9 to 20.4
DRD033R□015	3.33	1.48	17.5 to 18.9
DRD036R□016	3.62	1.61	16.2 to 17.5
DRD039R□018	3.94	1.76	15.0 to 16.2
DRD043R□019	4.28	1.91	13.5 to 15.0
DRD046R□021	4.65	2.06	12.6 to 13.5
DRD051R□022	5.06	2.24	11.6 to 12.6
DRD055R□024	5.50	2.44	10.8 to 11.6
DRD060R□027	5.98	2.65	9.7 to 10.8
DRD065R□029	6.50	2.88	9.0 to 9.7
DRD071R□031	7.07	3.14	8.3 to 9.0
DRD077R□034	7.69	3.41	7.7 to 8.3
DRD084R□037	8.36	3.71	6.9 to 7.7
DRD091R□040	9.09	4.03	6.4 to 6.9
DRD099R□044	9.88	4.38	5.9 to 6.4
DRD107R□048	10.75	4.77	5.5 to 5.9
DRD117R□052	11.68	5.18	5.0 to 5.5
DRD127R□056	12.70	5.63	4.6 to 5.0

DRT TYPE

Part Number	dr ± 0.05 (mm)	dr ± 0.1 (mm)	Lr ± 0.05 (mm)	Frequency Range (GHz)
DRT051R020□022	5.06	2.0	2.24	11.9 to 13.1
DRT055R020□024	5.50	2.0	2.44	11.0 to 11.9
DRT060R020□027	5.98	2.0	2.65	10.0 to 11.0
DRT065R020□029	6.50	2.0	2.88	9.1 to 10.0
DRT071R020□031	7.07	2.0	3.14	8.4 to 9.1
DRT077R020□034	7.69	2.0	3.41	7.7 to 8.4
DRT084R030□037	8.36	3.0	3.71	7.1 to 7.7
DRT091R030□040	9.09	3.0	4.03	6.5 to 7.1
DRT099R030□044	9.88	3.0	4.38	6.0 to 6.5
DRT105R030□046	10.50	3.0	4.60	5.7 to 6.0

PART NUMBERING



*Note: For actual dimension in mm, divide number by 10.