

GENERAL CHARACTERISTICS

- High unloaded Q – 7,000 min. at 7GHz.
- High dielectric constant – $\epsilon_r \approx 38$.
- Resonant frequency temperature coefficient can be chosen from 0 to 6ppm/°C. Tolerance of frequency temperature coefficient can be chosen from ± 0.5 , ± 1 , and ± 2 ppm/°C.

DIMENSIONS & FREQUENCY RANGE

DRD TYPE

Part Number	Dr ± 0.05 (mm)	Lr ± 0.05 (mm)	Frequency Range (GHz)
DRD046M□021	4.65	2.06	11.46 to 12.45
DRD051M□022	5.06	2.24	10.54 to 11.46
DRD055M□024	5.50	2.44	9.69 to 10.54
DRD060M□027	5.98	2.65	8.91 to 9.69
DRD065M□029	6.50	2.88	8.20 to 8.91
DRD071M□031	7.07	3.14	7.54 to 8.20
DRD077M□034	7.69	3.41	6.93 to 7.54
DRD084M□037	8.36	3.71	6.38 to 6.93
DRD091M□040	9.09	4.03	5.87 to 6.38
DRD099M□044	9.88	4.38	5.40 to 5.87
DRD107M□048	10.75	4.77	4.96 to 5.40
DRD117M□052	11.68	5.18	4.56 to 4.96
DRD127M□056	12.70	5.63	4.20 to 4.56
DRD138M□061	13.81	6.13	3.86 to 4.20
DRD150M□067	15.02	6.66	3.55 to 3.86
DRD163M□072	16.33	7.24	3.27 to 3.55
DRD178M□079	17.76	7.88	3.00 to 3.27
DRD193M□086	19.31	8.56	2.76 to 3.00
DRD210M□093	21.00	9.31	2.54 to 2.76
DRD228M□101	22.83	10.13	2.34 to 2.54
DRD248M□110	24.82	11.01	2.15 to 2.34
DRD270M□120	26.99	11.97	1.98 to 2.15
DRD293M□130	29.35	13.02	1.82 to 1.98
DRD319M□142	31.91	14.15	1.67 to 1.82
DRD347M□154	34.70	15.39	1.54 to 1.67

CONFIGURATION

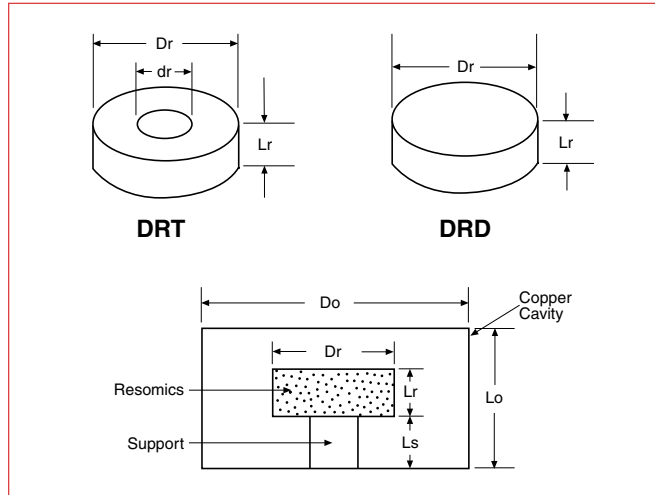


TABLE 1: Q & τ_f

Characteristic Code	Frequency Temperature Coefficient (τ_f) (ppm/°C)	Dielectric Constant (ϵ_r)	Unloaded Q (at 7GHz)
C	0	37.4 ± 0.5	7,400 min.
D	2	37.7 ± 0.5	7,200 min.
E	4	38.0 ± 0.5	7,100 min.
F	6	38.3 ± 0.5	7,000 min.

Q can be approximated by: $Q \geq \frac{100,000}{1.95 \times f_0 + 0.117 \times \tau_f - 0.15}$

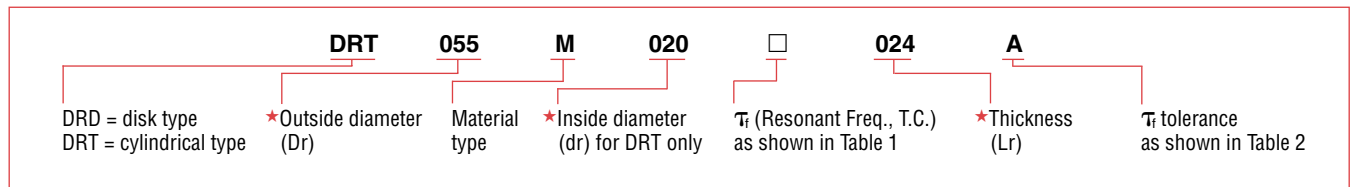
TABLE 2: τ_f TOLERANCE

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

DRT TYPE

Part Number	Dr ± 0.05 (mm)	dr ± 0.1 (mm)	Lr ± 0.05 (mm)	Frequency Range (GHz)
DRT051M020□022	5.06	2.0	2.24	10.45 to 11.45
DRT055M020□024	5.50	2.0	2.44	9.69 to 10.45
DRT060M020□027	5.98	2.0	2.65	8.91 to 9.69
DRT065M020□029	6.50	2.0	2.88	8.20 to 8.91
DRT071M020□031	7.07	2.0	3.14	7.54 to 8.20
DRT077M020□034	7.69	2.0	3.41	6.93 to 7.54
DRT084M030□037	8.36	3.0	3.71	6.38 to 6.93
DRT091M030□040	9.09	3.0	4.03	5.87 to 6.38
DRT099M030□044	9.88	3.0	4.38	5.40 to 5.87
DRT107M040□048	10.75	4.0	4.77	4.96 to 5.40
DRT117M040□052	11.68	4.0	5.18	4.56 to 4.96
DRT127M040□056	12.70	4.0	5.63	4.20 to 4.56
DRT138M040□061	13.81	4.0	6.13	3.86 to 4.20
DRT150M040□067	15.02	4.0	6.66	3.55 to 3.86
DRT163M040□072	16.33	4.0	7.24	3.27 to 3.55
DRT178M040□079	17.76	4.0	7.88	3.00 to 3.27
DRT193M040□086	19.31	4.0	8.56	2.76 to 3.00
DRT210M040□093	21.00	4.0	9.31	2.54 to 2.76

PART NUMBERING



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