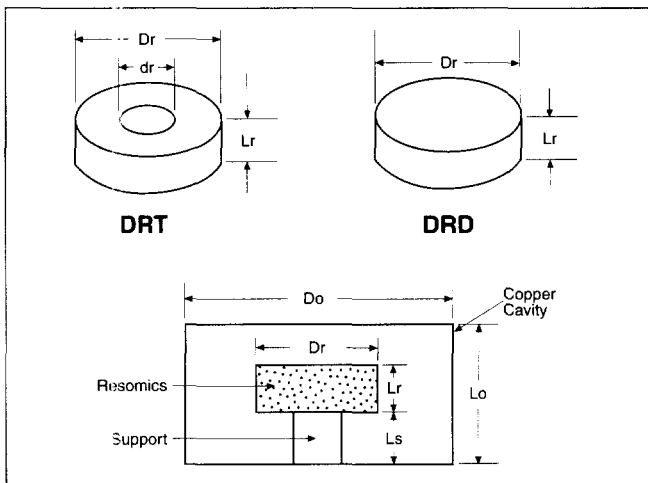


### GENERAL CHARACTERISTICS

- High unloaded Q — 15,000 min. @ 10GHz
- High dielectric constant —  $\epsilon_r \approx 27.9$
- The resonant frequency temperature coefficient can be chosen from 0 to 6ppm/°C. Tolerance of the frequency temperature coefficient can be chosen  $\pm 0.5$ ,  $\pm 1$  and  $\pm 2$ ppm/°C.
- Dielectric resonators are chosen from the frequency range of 5 to 26GHz in disk type (DRD), and from the frequency range of 6 to 13.5GHz in cylindrical type (DRT).

### CONFIGURATION



### DIMENSIONS & FREQUENCY RANGE

#### DRD TYPE

Part Number	Dr ± 0.05 (mm)	Lr ± 0.05 (mm)	Frequency Range (GHz)
DRD026B□012	2.59	1.15	23.67 ~ 25.94
DRD028B□013	2.82	1.25	21.75 ~ 23.67
DRD031B□014	3.06	1.36	20.03 ~ 21.75
DRD033B□015	3.33	1.48	18.40 ~ 20.03
DRD036B□016	3.62	1.61	16.92 ~ 18.40
DRD039B□018	3.94	1.76	15.53 ~ 16.92
DRD043B□019	4.28	1.91	14.30 ~ 15.53
DRD046B□021	4.65	2.06	13.19 ~ 14.30
DRD051B□022	5.06	2.24	12.13 ~ 13.19
DRD055B□024	5.50	2.44	11.15 ~ 12.13
DRD060B□027	5.98	2.65	10.26 ~ 11.15
DRD065B□029	6.50	2.88	9.44 ~ 10.26
DRD071B□031	7.07	3.14	8.67 ~ 9.44
DRD077B□034	7.69	3.41	7.97 ~ 8.67
DRD084B□037	8.36	3.71	7.33 ~ 7.97
DRD091B□040	9.09	4.03	6.75 ~ 7.33
DRD099B□044	9.88	4.38	6.21 ~ 6.75
DRD107B□048	10.75	4.77	5.70 ~ 6.21
DRD117B□052	11.68	5.18	5.25 ~ 5.70
DRD127B□056	12.70	5.63	4.83 ~ 5.25

TABLE 1: Q & T<sub>f</sub>

Characteristic Code	Frequency Temperature Coefficient (T <sub>f</sub> )	Dielectric Constant (ε <sub>r</sub> )	Unloaded Q (at 10GHz)
C	0 (ppm/°C)	27.9 ± 0.5	15,000 min.
M	1	27.9 ± 0.5	
D	2	27.9 ± 0.5	
N	3	27.9 ± 0.5	
E	4	27.9 ± 0.5	
O	5	27.9 ± 0.5	
F	6	27.9 ± 0.5	

Q can be approximate by:  $Q \geq \frac{150,000}{f_0}$   
 $f_0 = [\text{GHz}]$

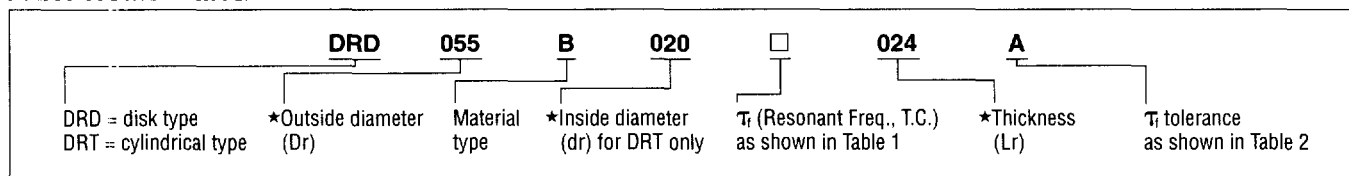
TABLE 2: T<sub>f</sub> TOLERANCE

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)
DRT051B020□022	5.06	2.0	2.24	12.47 ~ 13.66
DRT055B020□024	5.50	2.0	2.44	11.39 ~ 12.47
DRT060B020□027	5.98	2.0	2.65	10.42 ~ 11.39
DRT065B020□029	6.50	2.0	2.88	9.55 ~ 10.42
DRT071B020□031	7.07	2.0	3.14	8.74 ~ 9.55
DRT077B020□034	7.69	2.0	3.41	8.02 ~ 8.74
DRT084B030□037	8.36	3.0	3.71	7.48 ~ 8.02
DRT091B030□040	9.09	3.0	4.03	6.85 ~ 7.48
DRT099B030□044	9.88	3.0	4.38	6.28 ~ 6.85
DRT105B030□046	10.50	3.0	4.60	5.92 ~ 6.28

### PART NUMBERING



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

HIGH FREQUENCY DEVICES