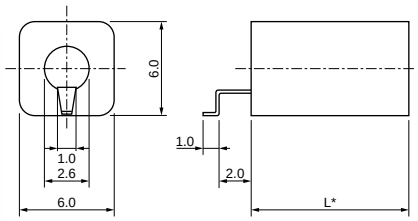
Dielectric Resonators (RESOMICS®)

Dielectric Resonator P Series (DRR Copper Plated Type)

■ Features

1. High dielectric constant : Er=21.
2. Excellent Solderability.
3. Higher unloaded Q using by solderless terminal.
4. These resonators cover wide range of resonant frequency (by 10MHz step).
5. Please consult our sales representatives or engineers as regards the products of other frequency.

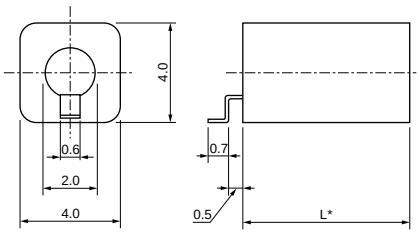
DRR060 Type



* Dimension L can be calculated by the following, using dielectric constant and resonant frequency.
$L \fallingdotseq 3 \times 10^{11}/(n\sqrt{\varepsilon r} \cdot f_0)$ (f_0 : Hz)
λ / 4 TEM mode : n=4 λ / 2 TEM mode : n=2

(in mm)

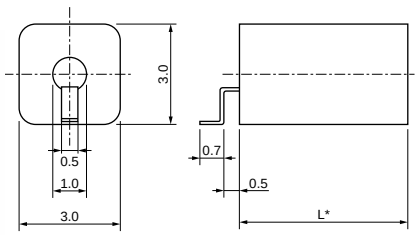
DRR040 Type



* Dimension L can be calculated by the following, using dielectric constant and resonant frequency.
$L \fallingdotseq 3 \times 10^{11}/(n\sqrt{\varepsilon r} \cdot f_0)$ (f_0 : Hz)
λ / 4 TEM mode : n=4 λ / 2 TEM mode : n=2

(in mm)

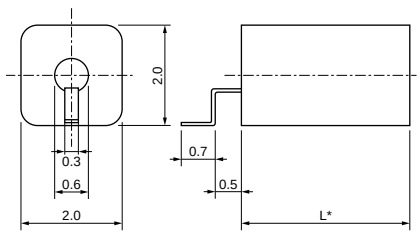
DRR030 Type



* Dimension L can be calculated by the following, using dielectric constant and resonant frequency.
$L \fallingdotseq 3 \times 10^{11}/(n\sqrt{\varepsilon r} \cdot f_0)$ (f_0 : Hz)
λ / 4 TEM mode : n=4 λ / 2 TEM mode : n=2

(in mm)

DRR020 Type



* Dimension L can be calculated by the following, using dielectric constant and resonant frequency.
$L \fallingdotseq 3 \times 10^{11}/(n\sqrt{\varepsilon r} \cdot f_0)$ (f_0 : Hz)
λ / 4 TEM mode : n=4 λ / 2 TEM mode : n=2

(in mm)

Part Number	f0 (MHz)	Unloaded Q (min)	Wavelength	Za (ohm)
DRR060□□□□□PTC00T	1000 to 1190	550	Lambda/4	11.9 (Nominal Value)
DRR060□□□□□PTC00T	1200 to 1790	600	Lambda/4	11.9 (Nominal Value)
DRR060□□□□□PTC00T	1800 to 2700	650	Lambda/4	11.9 (Nominal Value)
DRR060□□□□□PPC00T	2000 to 2490	800	Lambda/2	11.9 (Nominal Value)
DRR060□□□□□PPC00T	2500 to 3000	850	Lambda/2	11.9 (Nominal Value)
DRR040□□□□□PTC00R	1300 to 1490	350	Lambda/4	10.0 (Nominal Value)
DRR040□□□□□PTC00R	1500 to 1990	400	Lambda/4	10.0 (Nominal Value)
DRR040□□□□□PTC00R	2000 to 3000	450	Lambda/4	10.0 (Nominal Value)
DRR040□□□□□PPC00R	2500 to 3000	550	Lambda/2	10.0 (Nominal Value)
DRR030□□□□□PTC00R	1900 to 2490	380	Lambda/4	15.4 (Nominal Value)
DRR030□□□□□PTC00R	2500 to 3000	400	Lambda/4	15.4 (Nominal Value)
DRR020□□□□□PTC00R	2800 to 3500	250	Lambda/4	16.7 (Nominal Value)

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Part Number	f0 (MHz)	Unloaded Q (min)	Wavelength	Za (ohm)
DRR020□□□□□PTC00R	3510 to 5000	300	Lambda/4	16.7 (Nominal Value)

Dielectric Constant : 21.4+-0.2
Temperature coefficient of resonant frequency : 4+-2ppm/°C
Tolerance of resonant frequency : +-0.7% (Please contact our sales representatives)
Unloaded Q value depends on lower limit of frequency range.
Five blank columns are filled with Nominal Center Frequency codes. Please see Part Numbering for details.

■ Minimum Quantity of Taping

DRR020 Type : 2500pcs./phi 330mm Reel
DRR030 Type : 2000pcs./phi 330mm Reel
DRR040 Type : 1500pcs./phi 330mm Reel