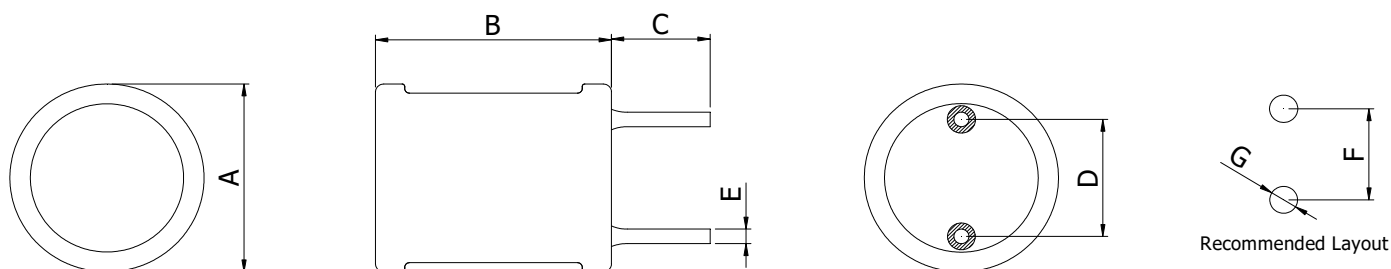


### Features

- High reliability, high consistency inductance
- Storage temperature range:-40°C to + 125°C
- Operating temperature range:-40°C to + 125°C  
(including coil's self-temperature rise)
- Moisture sensitivity level:1
- Packaging:600pcs. per bag
- RoHs&Halogen-free compliant



### Mechanical Dimension(Unit:mm)



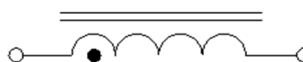
| A        | B       | C       | D       | E        | F       | G        |
|----------|---------|---------|---------|----------|---------|----------|
| Ø5.5Max. | 7.5±1.0 | 5.0±1.0 | 2.0±0.5 | Ø0.5±0.1 | 2.0±0.5 | Ø0.8Ref. |

### Part Number Description

DP04 - 0507 1R0 M  
① ② ③ ④

|   |                  |
|---|------------------|
| ① | Type             |
| ② | Dimensions       |
| ③ | Inductance value |
| ④ | Tolerance code   |

### Electrical Schematic



### Electrical Characteristic

| Part Number   | Inductance<br>L0(uH) | Q<br>Typ. | Q<br>Freq.(MHz) | SRF<br>(MHz)Typ. | DCR<br>(Ω)Max. | Rated Current<br>(A)Max. |
|---------------|----------------------|-----------|-----------------|------------------|----------------|--------------------------|
| DP04-05071R0M | 1.0±20%              | 100       | 7.96            | 120              | 0.035          | 2.00                     |
| DP04-05071R2M | 1.2±20%              | 100       | 7.96            | 120              | 0.058          | 1.95                     |
| DP04-05071R5M | 1.5±20%              | 100       | 7.96            | 120              | 0.075          | 1.90                     |
| DP04-05071R8M | 1.8±20%              | 100       | 7.96            | 120              | 0.110          | 1.80                     |
| DP04-05072R2M | 2.2±20%              | 100       | 7.96            | 100              | 0.120          | 1.75                     |
| DP04-05072R7M | 2.7±20%              | 100       | 7.96            | 80               | 0.125          | 1.68                     |
| DP04-05073R3M | 3.3±20%              | 100       | 7.96            | 75               | 0.130          | 1.50                     |
| DP04-05073R9M | 3.9±20%              | 100       | 7.96            | 70               | 0.135          | 1.45                     |
| DP04-05074R7M | 4.7±20%              | 100       | 7.96            | 50               | 0.140          | 1.32                     |
| DP04-05075R6M | 5.6±20%              | 100       | 7.96            | 45               | 0.145          | 1.23                     |
| DP04-05076R8M | 6.8±20%              | 100       | 7.96            | 30               | 0.150          | 1.15                     |
| DP04-05078R2M | 8.2±20%              | 100       | 7.96            | 22               | 0.160          | 1.10                     |
| DP04-0507100K | 10±10%               | 80        | 2.52            | 20               | 0.230          | 1.00                     |
| DP04-0507120K | 12±10%               | 80        | 2.52            | 17               | 0.240          | 0.97                     |
| DP04-0507150K | 15±10%               | 80        | 2.52            | 16               | 0.250          | 0.92                     |
| DP04-0507180K | 18±10%               | 80        | 2.52            | 12               | 0.330          | 0.86                     |
| DP04-0507220K | 22±10%               | 80        | 2.52            | 10               | 0.450          | 0.80                     |
| DP04-0507270K | 27±10%               | 80        | 2.52            | 9.5              | 0.500          | 0.71                     |
| DP04-0507330K | 33±10%               | 80        | 2.52            | 8.7              | 0.700          | 0.66                     |
| DP04-0507390K | 39±10%               | 70        | 2.52            | 8.2              | 0.740          | 0.60                     |
| DP04-0507470K | 47±10%               | 70        | 2.52            | 7.8              | 0.760          | 0.55                     |
| DP04-0507560K | 56±10%               | 50        | 2.52            | 7.6              | 0.800          | 0.50                     |
| DP04-0507680K | 68±10%               | 50        | 2.52            | 6.8              | 0.900          | 0.47                     |
| DP04-0507820K | 82±10%               | 50        | 2.52            | 6.0              | 0.950          | 0.43                     |
| DP04-0507101K | 100±10%              | 45        | 0.796           | 6.0              | 1.00           | 0.40                     |
| DP04-0507121K | 120±10%              | 45        | 0.796           | 5.5              | 1.10           | 0.37                     |
| DP04-0507151K | 150±10%              | 65        | 0.796           | 4.2              | 1.30           | 0.35                     |
| DP04-0507181K | 180±10%              | 65        | 0.796           | 3.6              | 1.50           | 0.32                     |
| DP04-0507221K | 220±10%              | 65        | 0.796           | 2.8              | 1.80           | 0.30                     |
| DP04-0507271K | 270±10%              | 50        | 0.796           | 2.4              | 1.90           | 0.28                     |
| DP04-0507331K | 330±10%              | 50        | 0.796           | 2.2              | 2.20           | 0.25                     |
| DP04-0507391K | 390±10%              | 50        | 0.796           | 2.0              | 2.70           | 0.22                     |
| DP04-0507471K | 470±10%              | 50        | 0.796           | 1.7              | 3.60           | 0.20                     |
| DP04-0507561K | 560±10%              | 50        | 0.796           | 1.5              | 4.20           | 0.19                     |
| DP04-0507681K | 680±10%              | 50        | 0.796           | 1.3              | 4.60           | 0.17                     |
| DP04-0507821K | 820±10%              | 50        | 0.796           | 1.1              | 5.70           | 0.16                     |
| DP04-0507102K | 1000±10%             | 90        | 0.252           | 1.0              | 6.70           | 0.15                     |
| DP04-0507122K | 1200±10%             | 90        | 0.252           | 0.9              | 8.20           | 0.14                     |
| DP04-0507152K | 1500±10%             | 80        | 0.252           | 0.8              | 13.0           | 0.12                     |
| DP04-0507182K | 1800±10%             | 80        | 0.252           | 0.8              | 15.0           | 0.11                     |
| DP04-0507222K | 2200±10%             | 80        | 0.252           | 0.8              | 17.0           | 0.10                     |

- Test frequency and voltage:1KHz,0.25Vrms.
- All test data referenced to 25°C ambient.
- Rated current: The DC current at which the inductance decreases to 90% of it's initial value or when  $\Delta t=20^{\circ}\text{C}$ , whichever is lower.