

AC□□□□ TYPE

● FEATURE

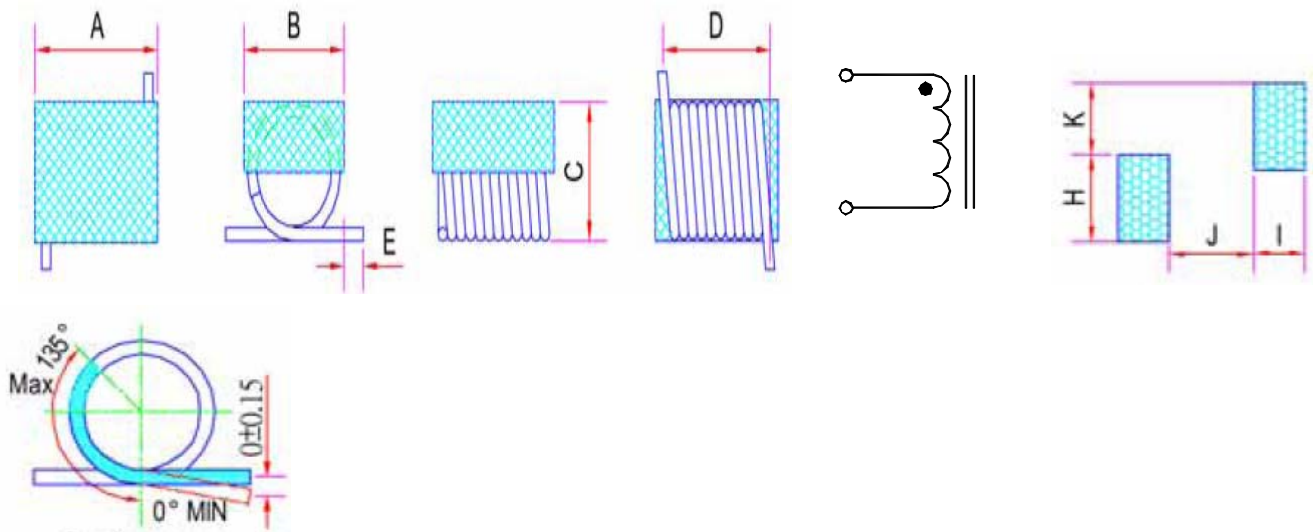
1. High Q over a wide frequency range.
2. Very close tolerance

● Applications

1. Satellite communication system.

● Shape and Dimension

● Schematics and Land Patterns(mm)



● Specification

Dimension in m/m

| TYPE | A | B | C | D | E | H | I | J | K |
|--------|-----------|----------|----------|-----------|-----------|------|------|------|------|
| AC0403 | 3.68 REF | 3.05 REF | 3.18 REF | 2.92±0.25 | 0.58±0.38 | 3.30 | 1.27 | 1.65 | 2.79 |
| AC0703 | 6.86 REF | 3.05 REF | 3.18 REF | 5.84±0.25 | 0.58±0.38 | 3.30 | 1.27 | 4.70 | 2.79 |
| AC0504 | 4.96 MAX | 3.81 MAX | 4.20 MAX | 4.32±0.39 | 1.53±0.39 | 5.16 | 1.48 | 2.85 | 2.62 |
| AC1006 | 10.55 MAX | 6.35 MAX | 5.97 MAX | 7.98±0.51 | 1.27±0.39 | 4.70 | 2.04 | 5.95 | 2.42 |

Note1. Measurement equipment of electrical : HP E4991A

Note2. Measurement ambient temperature of L, DCR and IDC : at 25°C

Note3. Inductance tolerance: J: ±5% ; K: ±10%

Note4. Ordering code : Part number + Inductance tolerance

Note5. Packaging: Taping ; Quantity : AC0403-2000 Piece/reel ; AC0703-2000 Piece/reel

AC0504-1000 Piece/reel ; AC1006-750 Piece/reel

Note6. This specification might be changed without notice due to under developing and improving.

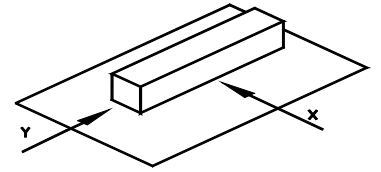
Thank you for your understanding.

| Part Number | Turns | L(nH) | Test Frequency (MHz) | Q min | SRF (MHz). | DCR (mΩMax) | IDC(A) (Max) |
|--------------|-------|-------|-------------------------|-------|---------------|----------------|-----------------|
| AC0403-2N5K | 1 | 2.5 | 150 | 145 | 12500 REF | 1.1 | 4.0 |
| AC0403-5N0K | 2 | 5.0 | 150 | 140 | 6500 REF | 1.8 | 4.0 |
| AC0403-8N0J | 3 | 8.0 | 150 | 140 | 5000 REF | 2.6 | 4.0 |
| AC0403-12N5J | 4 | 12.5 | 150 | 137 | 3300 REF | 3.4 | 4.0 |
| AC0403-18N5J | 5 | 18.5 | 150 | 132 | 2500 REF | 3.9 | 4.0 |
| AC0504-22NJ | 5 | 22 | 150 | 100 | 3200 REF | 4.2 | 3.0 |
| AC0504-27NJ | 5 | 27 | 150 | 100 | 2700 REF | 4.0 | 3.5 |
| AC0504-33NJ | 6 | 33 | 150 | 100 | 2500 REF | 4.8 | 3.0 |
| AC0504-39NJ | 6 | 39 | 150 | 100 | 2100 min | 4.4 | 3.0 |
| AC0504-47NJ | 7 | 47 | 150 | 100 | 2100 min | 5.6 | 3.0 |
| AC0504-56NJ | 7 | 56 | 150 | 100 | 1500 min | 6.2 | 3.0 |
| AC0504-68NJ | 8 | 68 | 150 | 100 | 1500 min | 8.2 | 2.5 |
| AC0504-82NJ | 8 | 82 | 150 | 100 | 1300 min | 9.4 | 2.5 |
| AC0504-R10J | 9 | 100 | 150 | 100 | 1200 min | 12.3 | 1.7 |
| AC0504-R12J | 10 | 120 | 150 | 100 | 1100 min | 17.3 | 1.5 |
| AC0703-17N5J | 6 | 17.5 | 150 | 100 | 2200 min | 4.5 | 4.0 |
| AC0703-22NJ | 7 | 22 | 150 | 102 | 2100 min | 5.2 | 4.0 |
| AC0703-28NJ | 8 | 28 | 150 | 105 | 1800 min | 6.0 | 4.0 |
| AC0703-35N5J | 9 | 35.5 | 150 | 112 | 1500 min | 6.8 | 4.0 |
| AC0703-43NJ | 10 | 43 | 150 | 106 | 1200 min | 7.9 | 4.0 |
| AC1006-90NJ | 9 | 90 | 50 | 95 | 1140 min | 15.0 | 3.5 |
| AC1006-R111J | 10 | 111 | 50 | 87 | 1020 min | 15.0 | 3.5 |
| AC1006-R130J | 11 | 130 | 50 | 87 | 900 min | 20.0 | 3.0 |
| AC1006-R169J | 12 | 169 | 50 | 95 | 875 min | 25.0 | 3.0 |
| AC1006-R206J | 13 | 206 | 50 | 95 | 800 min | 30.0 | 3.0 |
| AC1006-R222J | 14 | 222 | 50 | 92 | 730 min | 35.0 | 3.0 |
| AC1006-R246J | 15 | 246 | 50 | 95 | 685 min | 35.0 | 3.0 |
| AC1006-R307J | 16 | 307 | 50 | 95 | 660 min | 35.0 | 3.0 |
| AC1006-R380J | 17 | 380 | 50 | 95 | 590 min | 50.0 | 2.5 |
| AC1006-R422J | 18 | 422 | 50 | 95 | 540 min | 60.0 | 2.5 |
| AC1006-R491J | 19 | 491 | 50 | 95 | 535 min | 65.0 | 2.0 |
| AC1006-R538J | 20 | 538 | 50 | 87 | 490 min | 90.0 | 2.0 |

GENERAL CHARACTERISTICS

1. Operating temperature range: -40 TO + 125°C (Includes temperature when the coil is heated)
2. External appearance: On visual inspection, the coil has no external defects.
3. Terminal strength: After soldering. Between copper plate and terminals of coil. Push in two directions of X.Y withstanding at below conditions.

Terminal should not peel off. (refer to figure at right) 0.5kg



4. Insulating resistance: Over 100MΩ at 100V D.C. between coil and core.
5. Dielectric strength: No dielectric breakdown at 100V D.C. for 1 minute between coil and core.
6. Temperature characteristics: Inductance coefficient $(0\sim 2,000)\times 10^{-6}/^{\circ}\text{C}$ $(-25\sim +80^{\circ}\text{C})$.
7. Humidity characteristics(Moisture Resistance): Inductance deviation within $\pm 5\%$, after 96 hours in 90~95% relative humidity at $40 \pm 2^{\circ}\text{C}$ and 1 hour drying under normal condition.
8. Vibration resistance: Inductance deviation within $\pm 5\%$, after vibration for 1 hour. In each of three orientations at sweep vibration $(10\sim 55\sim 10\text{ Hz})$ with 1.5mm P-P amplitudes.
9. Shock resistance: Inductance deviation within $\pm 5\%$, after being dropped once with 981m/s² (100G) shock attitude upon a rubber block method shock testing machine, in three different orientations.
10. Resistance to Soldering Heat: 260°C, 10 seconds(See attached recommend reflow)
11. Storage environment: Storage condition: Temperature Range: 10°C ~ 35°C (Generally: 21°C ~ 31°C) , Humidity Range: 50% ~ 80% RH (Generally: 65% ~ 75%) ; Transportation condition: Temperature Range: -35°C ~ 85°C , Humidity Range: 50% ~ 95% RH
12. Use components within 12 months. If 12 months or more have elapsed, check solderability before use.
13. Reflow profile recommend:

Lead-free heat endurance test

Lead-free the recommended reflow condition

