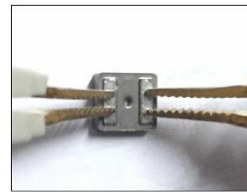
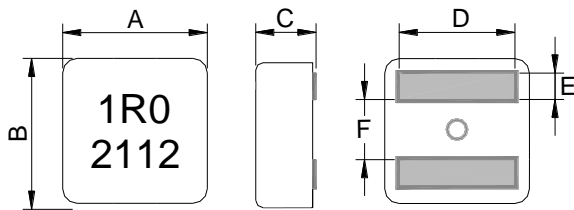




FEATURES

1. Low loss realized with low DCR.
2. High performance realized by metal dust core.
3. Ultra low buzz noise, due to composite construction.
4. 100% Lead(Pb)-Free and RoHS compliant.

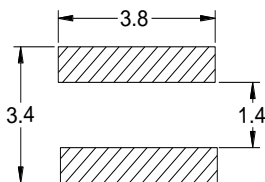
DIMENSIONS (mm)



RDC Test

Marking: Black.1R0 and 2112 (21 YY,12 WW, follow production date)

Recommend PC Board Pattern



Note:

1. PCB layout is referred to standard IPC-7351B
2. The above PCB layout reference only.
3. Recommend solder paste thickness at 0.12mm and above.

| Part No. | Size (mm) | | | | | |
|------------|-----------|-----------|-----------|-----------|------------|------------|
| | A | B | C | D | E | F |
| SRPI 0402F | 4.4 ± 0.2 | 4.4 ± 0.2 | 1.9 ± 0.2 | 3.4 ± 0.3 | 0.88 ± 0.2 | 1.6 ± 0.25 |

SERIES LIST

| No. | Part No. | L | RDC | | Isat | | Irms | |
|-----|-----------------|--------------------------|------|------|------|------|----------|----------|
| | | (μ H) $\pm 20\%$ | Typ. | Max. | Typ. | Max. | (A) Typ. | (A) Typ. |
| 1 | SPRI 0402F-R10M | 0.10 | 2.2 | 2.42 | 38.0 | 33.0 | 13.5 | 18.0 |
| 2 | SPRI 0402F-R22M | 0.22 | 4.1 | 4.60 | 19.5 | 18.8 | 13.0 | 16.8 |
| 3 | SPRI 0402F-R33M | 0.33 | 5.0 | 5.50 | 18.0 | 16.5 | 12.0 | 15.5 |
| 4 | SPRI 0402F-R36M | 0.36 | 5.6 | 6.30 | 17.0 | 15.0 | 11.0 | 14.5 |
| 5 | SPRI 0402F-R40M | 0.40 | 6.9 | 7.73 | 15.5 | 13.5 | 10.0 | 14.0 |
| 6 | SPRI 0402F-R47M | 0.47 | 7.8 | 8.58 | 14.5 | 13.0 | 9.0 | 12.5 |
| 7 | SPRI 0402F-R56M | 0.56 | 8.4 | 9.30 | 14.0 | 12.6 | 8.5 | 12.0 |
| 8 | SPRI 0402F-R60M | 0.60 | 8.6 | 9.52 | 13.7 | 12.3 | 8.0 | 11.7 |
| 9 | SPRI 0402F-R72M | 0.72 | 10.4 | 11.6 | 12.0 | 10.6 | 7.6 | 10.5 |
| 10 | SPRI 0402F-1R0M | 1.00 | 13.3 | 14.6 | 9.6 | 8.8 | 6.8 | 9.6 |
| 11 | SPRI 0402F-1R2M | 1.20 | 16.2 | 17.9 | 9.0 | 7.8 | 6.6 | 9.0 |
| 12 | SPRI 0402F-1R5M | 1.50 | 21.0 | 23.5 | 8.0 | 7.4 | 5.8 | 7.6 |
| 13 | SPRI 0402F-1R8M | 1.80 | 25.0 | 28.0 | 7.5 | 7.0 | 5.2 | 7.0 |

Note:

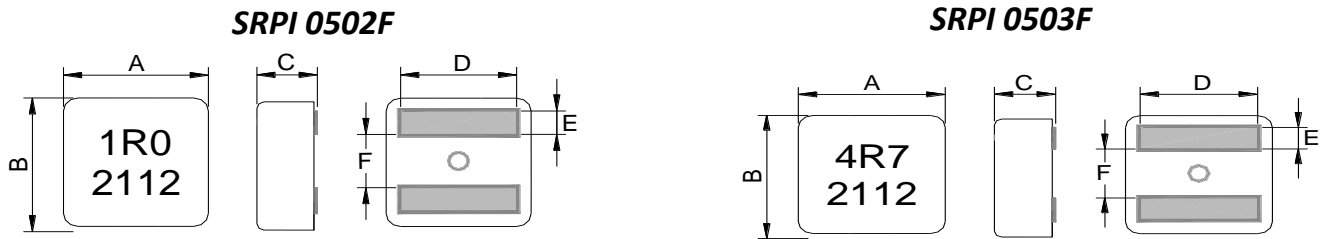
1. Test Frequency: 100KHz /0.1V
2. All test data referenced to 25°C ambient
3. Heat Rated Current (Irms) will cause the coil temperature rise approximately ΔT of 40°C
4. Saturation Current (Isat) will cause L0 to drop approximately 30%.
5. The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions.
Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
6. Irms Testing : Temperature rise is highly dependent on many factors including pcb land pattern, trace size, and proximity to other components. Therefore temperature rise should be verified in application conditions.
7. Rated operating voltage (across inductor) 15V ref (1.5uH and above)
Rated operating voltage (across inductor) 40V ref (1.2uH and below)
8. Rated DC current: The lower value of Irms and Isat.



FEATURES

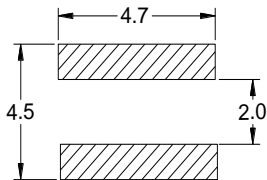
1. Low loss realized with low DCR.
2. High performance realized by metal dust core.
3. Ultra low buzz noise, due to composite construction.

DIMENSIONS (mm)



Marking: Black.1R0 and 2112 (21 YY,12 WW, follow production date)

Recommend PC Board Pattern



Note:

1. PCB layout is referred to standard IPC-7351B
2. The above PCB layout reference only.
3. Recommend solder paste thickness at 0.12mm and above.

| Part No. | Size (mm) | | | | | |
|------------|-----------|-----------|-----------|-----------|-----------|------------|
| | A | B | C | D | E | F |
| SRPI 0502F | 6.0 ± 0.2 | 5.7 ± 0.2 | 1.9 ± 0.2 | 4.3 ± 0.3 | 1.1 ± 0.2 | 2.3 ± 0.25 |
| SRPI 0503F | 6.0 ± 0.2 | 5.7 ± 0.2 | 2.9 ± 0.2 | 4.3 ± 0.3 | 1.1 ± 0.2 | 2.3 ± 0.25 |

SERIES LIST

| No. | Part No. | L | RDC | | Isat | | Irms | |
|-----|-----------------|--------------------------|------|-------|------|------|-----------|-----------|
| | | (μ H) $\pm 20\%$ | Typ. | Max. | Typ. | Max. | 20°C rise | 40°C rise |
| 1 | SPRI 0502F-R15M | 0.15 | 4.00 | 4.60 | 30.0 | 27.0 | 13.9 | 18.8 |
| 2 | SPRI 0502F-R16M | 0.16 | 4.00 | 4.60 | 30.0 | 27.0 | 13.9 | 18.8 |
| 3 | SPRI 0502F-R33M | 0.33 | 6.10 | 7.00 | 26.0 | 24.0 | 10.5 | 14.4 |
| 4 | SPRI 0502F-R47M | 0.47 | 7.00 | 8.05 | 22.0 | 20.0 | 10.1 | 14.1 |
| 5 | SPRI 0502F-R56M | 0.56 | 8.70 | 9.54 | 19.0 | 16.0 | 9.9 | 13.9 |
| 6 | SPRI 0502F-R68M | 0.68 | 8.90 | 10.20 | 16.0 | 14.0 | 9.6 | 13.4 |
| 7 | SPRI 0502F-R80M | 0.80 | 10.3 | 11.80 | 15.5 | 13.5 | 9.4 | 13.0 |
| 8 | SPRI 0502F-R82M | 0.82 | 11.0 | 12.70 | 15.0 | 13.0 | 8.5 | 12.0 |
| 9 | SPRI 0502F-1R0M | 1.00 | 12.0 | 13.80 | 14.5 | 12.8 | 7.5 | 10.5 |
| 10 | SPRI 0502F-1R2M | 1.20 | 14.2 | 16.30 | 14.0 | 12.2 | 6.8 | 9.4 |
| 11 | SPRI 0502F-1R5M | 1.50 | 16.2 | 18.70 | 13.3 | 11.7 | 6.4 | 8.8 |
| 1 | SPRI 0503F-R15M | 0.15 | 2.10 | 2.31 | 36.0 | 32.5 | 14.3 | 22.2 |
| 2 | SPRI 0503F-R16M | 0.16 | 2.12 | 2.33 | 35.0 | 32.0 | 14.2 | 22.2 |
| 3 | SPRI 0503F-R28M | 0.28 | 3.00 | 3.30 | 32.0 | 28.0 | 14.0 | 19.0 |
| 4 | SPRI 0503F-R33M | 0.33 | 3.20 | 3.52 | 28.0 | 26.0 | 13.8 | 19.2 |
| 5 | SPRI 0503F-R47M | 0.47 | 3.75 | 4.13 | 26.0 | 24.0 | 13.7 | 18.4 |
| 6 | SPRI 0503F-R56M | 0.56 | 4.05 | 4.52 | 22.2 | 20.2 | 13.6 | 17.7 |
| 7 | SPRI 0503F-R60M | 0.60 | 4.11 | 4.52 | 22.0 | 20.0 | 13.6 | 17.7 |
| 8 | SPRI 0503F-R80M | 0.80 | 5.14 | 5.65 | 20.0 | 18.0 | 10.1 | 13.1 |
| 9 | SPRI 0503F-R82M | 0.82 | 5.25 | 5.78 | 19.7 | 17.6 | 9.9 | 12.9 |
| 10 | SPRI 0503F-1R0M | 1.00 | 6.90 | 7.60 | 16.5 | 14.3 | 9.0 | 12.2 |
| 11 | SPRI 0503F-1R2M | 1.20 | 8.80 | 9.70 | 15.0 | 13.5 | 8.5 | 11.0 |
| 12 | SPRI 0503F-1R5M | 1.50 | 10.1 | 11.2 | 14.0 | 12.5 | 8.0 | 10.5 |
| 13 | SPRI 0503F-1R8M | 1.80 | 11.5 | 12.7 | 12.3 | 11.3 | 7.6 | 10.1 |
| 14 | SPRI 0503F-2R2M | 2.20 | 13.2 | 14.5 | 10.0 | 9.0 | 7.2 | 9.7 |
| 15 | SPRI 0503F-3R3M | 3.30 | 21.0 | 23.1 | 9.5 | 8.7 | 5.9 | 8.1 |
| 16 | SPRI 0503F-3R6M | 3.60 | 25.0 | 27.5 | 9.0 | 7.9 | 4.6 | 6.5 |
| 17 | SPRI 0503F-4R7M | 4.70 | 33.0 | 36.3 | 8.2 | 7.0 | 4.3 | 5.9 |

Note:

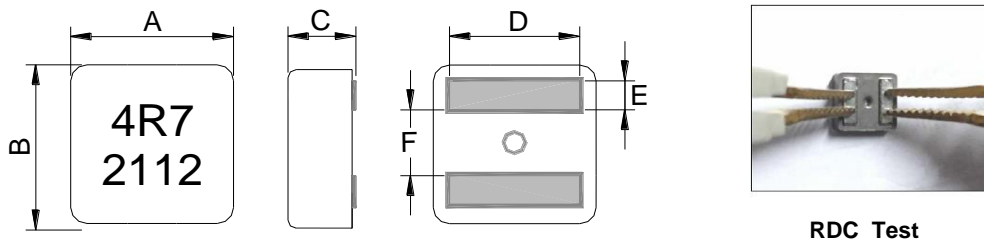
1. Test Frequency: 100KHz /0.1V
2. All test data referenced to 25°C ambient
3. Current that causes the specified temperature rise from 25°C ambient.
4. Saturation Current (Isat) will cause L0 to drop approximately 30%.
5. The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions.
Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
6. Irms Testing : Temperature rise is highly dependent on many factors including pcb land pattern, trace size, and proximity to other components. Therefore temperature rise should be verified in application conditions.
7. Rated voltage 40V DC · The application of voltage depends on many factors · Over voltage may cause components failure · high temperature · and burn-out · User needs to verify for appropriate usage.
8. Rated DC current: The lower value of Irms and Isat.



FEATURES

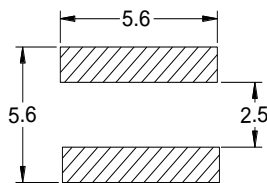
1. Low loss realized with low DCR.
2. High performance realized by metal dust core.
3. Ultra low buzz noise, due to composite construction.
4. 100% Lead(Pb)-Free and RoHS compliant.

DIMENSIONS (mm)



Marking: Black.4R7 and 2112 (21 YY,12 WW, follow production date)

Recommend PC Board Pattern



Note:

1. PCB layout is referred to standard IPC-7351B
2. The above PCB layout reference only.
3. Recommend solder paste thickness at 0.15mm and above.

| Part No. | Size (mm) | | | | | |
|------------|-----------|-----------|----------------|----------------|-----------|------------|
| | A | B | C | D | E | F |
| SRPI 0603F | 7.2 ± 0.2 | 6.9 ± 0.2 | See spec table | See spec table | 1.4 ± 0.2 | 2.6 ± 0.25 |
| SRPI 0604F | 7.2 ± 0.2 | 6.9 ± 0.2 | 3.8 ± 0.2 | See spec table | 1.4 ± 0.2 | 2.6 ± 0.25 |
| SRPI 0605F | 7.2 ± 0.2 | 6.9 ± 0.2 | 4.8 ± 0.2 | See spec table | 1.4 ± 0.2 | 2.6 ± 0.25 |

SERIES LIST

| No. | Part No. | L | RDC | | Isat | | Irms | | C | D |
|-----|-----------------|------------|---------------|------|------|------|-----------|-----------|-----------|-----------|
| | | (μ H) | (m Ω) | | (A) | | (A) Typ. | | (mm) | (mm) |
| | | $\pm 20\%$ | Typ. | Max. | Typ. | Max. | 20°C rise | 40°C rise | ± 0.2 | ± 0.3 |
| 1 | SPRI 0603F-R18M | 0.18 | 1.60 | 1.75 | 40.0 | 36.0 | 24.0 | 32.0 | 2.8 | 5.30 |
| 2 | SPRI 0603F-R33M | 0.33 | 2.25 | 2.50 | 32.0 | 28.0 | 20.0 | 25.0 | 2.8 | 5.55 |
| 3 | SPRI 0603F-R56M | 0.56 | 3.00 | 3.31 | 29.0 | 25.0 | 17.0 | 22.0 | 2.8 | 5.30 |
| 4 | SPRI 0603F-R68M | 0.68 | 4.70 | 5.17 | 25.0 | 21.0 | 15.0 | 20.0 | 2.8 | 5.30 |
| 5 | SPRI 0603F-1R0M | 1.00 | 5.50 | 6.05 | 23.0 | 18.0 | 13.0 | 18.0 | 2.8 | 5.20 |
| 6 | SPRI 0603F-1R2M | 1.20 | 6.7 | 7.40 | 22.0 | 16.0 | 12.0 | 16.0 | 2.8 | 5.15 |
| 7 | SPRI 0603F-1R5M | 1.50 | 8.3 | 9.13 | 20.0 | 15.5 | 11.0 | 15.0 | 2.9 | 5.15 |
| 8 | SPRI 0603F-1R8M | 1.80 | 9.2 | 10.2 | 18.2 | 13.0 | 10.0 | 14.0 | 2.9 | 5.10 |
| 9 | SPRI 0603F-2R2M | 2.20 | 11.0 | 12.2 | 15.9 | 11.0 | 7.0 | 10.0 | 2.9 | 5.05 |
| 10 | SPRI 0603F-3R3M | 3.30 | 18.8 | 20.8 | 12.2 | 9.0 | 6.0 | 8.0 | 2.9 | 5.00 |
| 11 | SPRI 0603F-4R5M | 4.50 | 23.0 | 25.3 | 10.0 | 8.0 | 5.0 | 7.0 | 2.9 | 5.00 |
| 12 | SPRI 0603F-4R7M | 4.70 | 26.5 | 29.2 | 9.0 | 7.0 | 4.0 | 6.0 | 2.9 | 5.00 |

| No. | Part No. | L | RDC | | Isat | | Irms | | D |
|-----|-----------------|------------|---------------|------|------|------|-----------|-----------|-----------|
| | | (μ H) | (m Ω) | | (A) | | (A) Typ. | | (mm) |
| | | $\pm 20\%$ | Typ. | Max. | Typ. | Max. | 20°C rise | 40°C rise | ± 0.3 |
| 1 | SPRI 0604F-R47M | 0.47 | 2.60 | 2.86 | 31.0 | 27.0 | 19.0 | 24.0 | 5.5 |
| 2 | SPRI 0604F-R68M | 0.68 | 3.60 | 3.96 | 26.0 | 22.0 | 16.0 | 20.5 | 5.5 |
| 3 | SPRI 0604F-1R0M | 1.00 | 4.90 | 5.39 | 23.0 | 18.0 | 14.0 | 19.0 | 5.2 |
| 4 | SPRI 0604F-1R5M | 1.50 | 6.40 | 7.04 | 17.0 | 13.0 | 12.0 | 16.0 | 5.2 |
| 5 | SPRI 0604F-2R2M | 2.20 | 10.60 | 11.7 | 15.9 | 11.5 | 8.0 | 11.0 | 5.0 |
| 6 | SPRI 0604F-3R3M | 3.30 | 14.1 | 15.5 | 12.3 | 9.6 | 7.0 | 9.2 | 5.0 |
| 7 | SPRI 0604F-4R7M | 4.70 | 21.0 | 23.1 | 10.2 | 8.0 | 6.0 | 7.8 | 5.0 |
| 8 | SPRI 0604F-5R6M | 5.60 | 25.5 | 28.1 | 9.8 | 7.8 | 5.0 | 6.7 | 5.0 |
| 1 | SPRI 0605F-R82M | 0.82 | 3.80 | 4.18 | 24.0 | 20.0 | 16.0 | 21.0 | 5.3 |
| 2 | SPRI 0605F-1R0M | 1.00 | 4.10 | 4.52 | 23.0 | 18.0 | 15.0 | 20.0 | 5.3 |
| 3 | SPRI 0605F-1R2M | 1.20 | 5.30 | 5.83 | 22.0 | 16.0 | 14.0 | 18.0 | 5.3 |
| 4 | SPRI 0605F-1R5M | 1.50 | 5.70 | 6.30 | 19.5 | 14.5 | 13.0 | 17.0 | 5.3 |
| 5 | SPRI 0605F-1R8M | 1.80 | 6.40 | 7.10 | 18.5 | 13.5 | 12.0 | 16.0 | 5.3 |
| 6 | SPRI 0605F-2R2M | 2.20 | 7.70 | 8.50 | 16.0 | 12.0 | 10.0 | 13.0 | 5.2 |
| 7 | SPRI 0605F-3R3M | 3.30 | 11.2 | 12.5 | 12.5 | 10.0 | 8.5 | 11.0 | 5.2 |
| 8 | SPRI 0605F-4R3M | 4.30 | 15.1 | 16.2 | 11.0 | 8.5 | 7.0 | 9.0 | 5.2 |
| 9 | SPRI 0605F-4R7M | 4.70 | 16.7 | 18.4 | 10.5 | 8.4 | 6.5 | 8.5 | 5.2 |
| 10 | SPRI 0605F-5R6M | 5.60 | 20.0 | 22.0 | 10.0 | 8.3 | 5.7 | 7.0 | 5.2 |
| 11 | SPRI 0605F-6R8M | 6.80 | 23.1 | 25.4 | 9.0 | 7.0 | 5.2 | 6.6 | 5.2 |
| 12 | SPRI 0605F-8R2M | 8.20 | 28.6 | 31.5 | 8.0 | 6.8 | 4.5 | 6.2 | 5.2 |

Note:

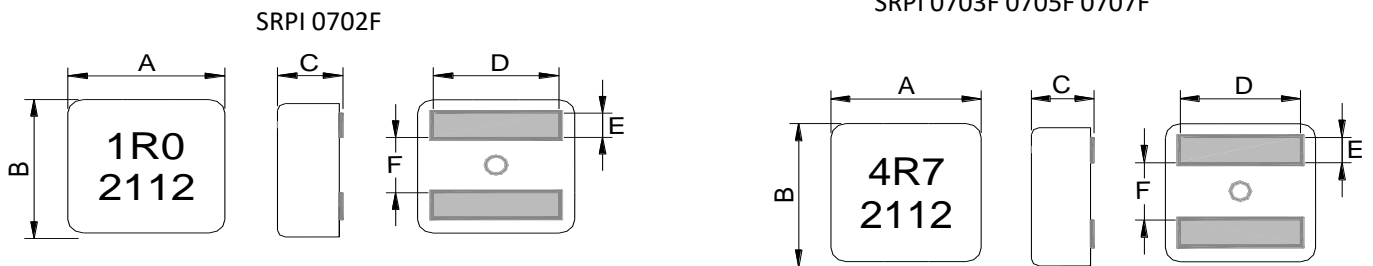
1. Test Frequency: 100KHz /0.1V
2. All test data referenced to 25°C ambient
3. Current that causes the specified temperature rise from 25°C ambient.
4. Saturation Current (Isat) will cause L0 to drop approximately 30%.
5. The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions.
Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
6. Irms Testing : Temperature rise is highly dependent on many factors including pcb land pattern, trace size, and proximity to other components. Therefore temperature rise should be verified in application conditions.
7. Rated voltage 40V DC · The application of voltage depends on many factors · Over voltage may cause components failure · high temperature · and burn-out · User needs to verify for appropriate usage.
8. Rated DC current: The lower value of Irms and Isat.



FEATURES

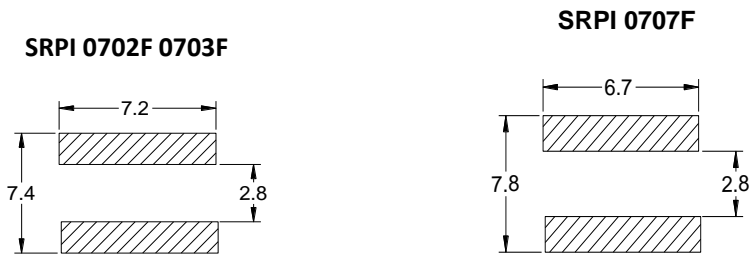
1. Low loss realized with low DCR.
2. High performance realized by metal dust core.
3. Ultra low buzz noise, due to composite construction.
4. 100% Lead(Pb)-Free and RoHS compliant.

DIMENSIONS (mm)



Marking: Black.1R0and 2112 (21 YY,12 WW, follow production date)

Recommend PC Board Pattern



| Part No. | Size (mm) | | | | | |
|------------|-----------|-----------|-----------|----------------|------------|-------------|
| | A | B | C | D | E | F |
| SRPI 0702F | 8.4 ± 0.3 | 8.0 ± 0.3 | 1.85± 0.2 | See spec table | 1.75 ± 0.2 | 3.15 ± 0.25 |
| SRPI 0703F | 8.4 ± 0.3 | 8.0 ± 0.3 | 2.9 ± 0.2 | See spec table | 1.75 ± 0.2 | 3.15 ± 0.25 |
| SRPI 0705F | 8.4 ± 0.3 | 8.0 ± 0.3 | 4.8± 0.2 | See spec table | 1.75 ± 0.2 | 3.15 ± 0.25 |
| SRPI 0707F | 8.4 ± 0.3 | 8.0 ± 0.3 | 6.7 ± 0.3 | See spec table | 1.75 ± 0.2 | 3.15 ± 0.25 |

SERIES LIST

| No. | Part No. | L | RDC | | Isat | | Irms | | D |
|-----|-----------------|------------|---------------|-------|------|------|-----------|-----------|-----------|
| | | (μ H) | (m Ω) | | (A) | | (A) Typ. | | (mm) |
| | | $\pm 20\%$ | Typ. | Max. | Typ. | Max. | 20°C rise | 40°C rise | ± 0.3 |
| 1 | SPRI 0702F-R15M | 0.15 | 1.90 | 2.50 | 51.0 | 46.0 | 18.0 | 24.0 | 6.6 |
| 2 | SPRI 0702F-R27M | 0.27 | 2.90 | 3.50 | 35.0 | 32.0 | 16.0 | 21.0 | 6.6 |
| 3 | SPRI 0702F-R31M | 0.31 | 4.00 | 4.80 | 34.0 | 31.0 | 14.0 | 20.0 | 6.2 |
| 4 | SPRI 0702F-R33M | 0.33 | 4.00 | 4.80 | 34.0 | 31.0 | 13.0 | 19.0 | 6.2 |
| 5 | SPRI 0702F-R47M | 0.47 | 5.1 | 6.2 | 28.0 | 25.0 | 12.0 | 17.0 | 6.2 |
| 6 | SPRI 0702F-R68M | 0.68 | 7.9 | 9.2 | 25.0 | 23.0 | 10.0 | 13.0 | 6.2 |
| 7 | SPRI 0702F-1R0M | 1.00 | 9.8 | 10.8 | 23.0 | 20.0 | 8.0 | 11.0 | 6.2 |
| 8 | SPRI 0702F-1R2M | 1.20 | 11.5 | 12.8 | 21.0 | 18.0 | 7.0 | 10.0 | 6.2 |
| 9 | SPRI 0702F-1R5M | 1.50 | 16.0 | 17.6 | 17.0 | 15.0 | 6.0 | 9.0 | 6.2 |
| 10 | SPRI 0702F-1R8M | 1.80 | 18.0 | 19.8 | 15.0 | 13.0 | 5.5 | 8.0 | 6.2 |
| 1 | SPRI 0703F-R36M | 0.36 | 2.10 | 2.31 | 41.0 | 37.0 | 19.0 | 24.0 | 6.6 |
| 2 | SPRI 0703F-R60M | 0.60 | 2.90 | 3.20 | 36.0 | 32.0 | 18.0 | 23.0 | 6.6 |
| 3 | SPRI 0703F-1R0M | 1.00 | 4.55 | 5.00 | 30.0 | 28.0 | 16.1 | 21.8 | 6.6 |
| 4 | SPRI 0703F-1R5M | 1.50 | 7.50 | 8.25 | 25.0 | 23.5 | 12.0 | 15.3 | 6.6 |
| 5 | SPRI 0703F-2R2M | 2.20 | 12.4 | 13.7 | 19.0 | 17.0 | 10.0 | 13.0 | 6.2 |
| 6 | SPRI 0703F-2R7M | 2.70 | 14.0 | 15.4 | 16.0 | 13.5 | 9.2 | 11.4 | 6.2 |
| 7 | SPRI 0703F-3R3M | 3.30 | 16.3 | 18.0 | 15.0 | 13.0 | 8.0 | 10.0 | 6.2 |
| 8 | SPRI 0703F-4R7M | 4.70 | 24.2 | 26.7 | 13.5 | 12.2 | 6.9 | 9.0 | 6.2 |
| 9 | SPRI 0703F-5R6M | 5.60 | 30.1 | 33.2 | 12.5 | 11.5 | 5.3 | 7.3 | 6.2 |
| 1 | SPRI 0705F-2R2M | 2.20 | 5.8 | 6.4 | 21.0 | 17.0 | 11.0 | 14.0 | 6.2 |
| 2 | SPRI 0705F-3R3M | 3.30 | 10.4 | 11.44 | 17.0 | 14.0 | 10.0 | 13.0 | 6.2 |
| 3 | SPRI 0705F-4R7M | 4.70 | 14.0 | 15.4 | 15.0 | 13.0 | 8.5 | 11.0 | 6.2 |
| 4 | SPRI 0705F-5R6M | 5.60 | 15.6 | 17.2 | 13.0 | 11.0 | 7.0 | 10.0 | 6.2 |
| 1 | SPRI 0707F-1R0M | 1.00 | 2.55 | 2.81 | 34.8 | 31.8 | 20.0 | 25.0 | 6.7 |
| 2 | SPRI 0707F-1R5M | 1.50 | 3.75 | 4.13 | 28.8 | 25.8 | 16.8 | 22.0 | 6.7 |
| 3 | SPRI 0707F-1R8M | 1.80 | 4.05 | 4.46 | 25.0 | 23.0 | 15.8 | 21.0 | 6.7 |
| 4 | SPRI 0707F-2R2M | 2.20 | 5.73 | 6.33 | 19.6 | 17.6 | 13.2 | 17.8 | 6.7 |
| 5 | SPRI 0707F-3R3M | 3.30 | 8.56 | 9.42 | 19.4 | 15.1 | 11.5 | 15.1 | 6.7 |
| 6 | SPRI 0707F-4R7M | 4.70 | 12.20 | 13.50 | 15.5 | 14.0 | 10.5 | 13.6 | 6.7 |
| 7 | SPRI 0707F-5R6M | 5.60 | 13.67 | 15.03 | 14.1 | 12.0 | 8.5 | 11.4 | 6.5 |
| 8 | SPRI 0707F-6R8M | 6.80 | 17.80 | 19.60 | 12.8 | 11.0 | 7.0 | 9.5 | 6.5 |
| 9 | SPRI 0707F-100M | 10.0 | 24.0 | 26.4 | 10.0 | 9.0 | 5.0 | 7.0 | 6.5 |

Note:

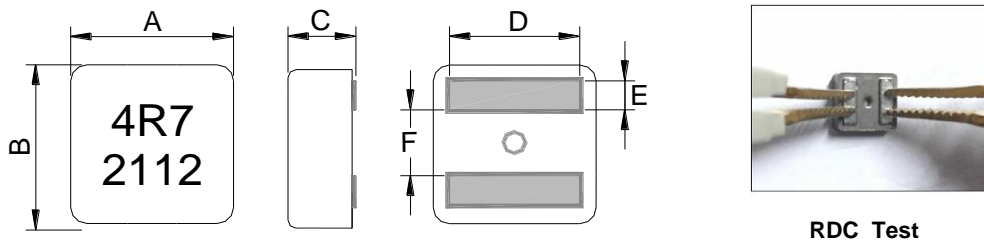
1. Test Frequency: 100KHz /0.1V
2. All test data referenced to 25°C ambient
3. Current that causes the specified temperature rise from 25°C ambient.
4. Saturation Current (Isat) will cause L0 to drop approximately 30%.
5. The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions.
Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
6. Irms Testing : Temperature rise is highly dependent on many factors including pcb land pattern, trace size, and proximity to other components. Therefore temperature rise should be verified in application conditions.
7. Rated voltage 40V DC · The application of voltage depends on many factors · Over voltage may cause components failure · high temperature · and burn-out · User needs to verify for appropriate usage.
8. Rated DC current: The lower value of Irms and Isat.



FEATURES

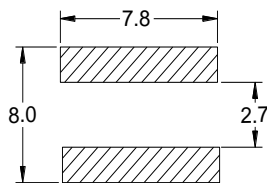
1. Low loss realized with low DCR.
2. High performance realized by metal dust core.
3. Ultra low buzz noise, due to composite construction.
4. 100% Lead(Pb)-Free and RoHS compliant.

DIMENSIONS (mm)



Marking: Black.4R7and 2112 (21 YY,12 WW, follow production date)

Recommend PC Board Pattern



Note:

1. PCB layout is referred to standard IPC-7351B
2. The above PCB layout reference only.
3. Recommend solder paste thickness at 0.15mm and above.

| Part No. | Size (mm) | | | | | |
|------------|-----------|-----------|-----------|----------------|-----------|-----------|
| | A | B | C | D | E | F |
| SRPI 0808F | 8.9 ± 0.3 | 8.5 ± 0.3 | 7.7 ± 0.3 | See spec table | 1.8 ± 0.2 | 3.5 ± 0.3 |

■ SERIES LIST

| No. | Part No. | L | RDC | | Isat | | Irms | | D |
|-----|-----------------|--------------------------|---------------|------|------|------|-----------|-----------|-----------|
| | | (μ H) $\pm 20\%$ | (m Ω) | | (A) | | (A) Typ. | | (mm) |
| | | | Typ. | Max. | Typ. | Max. | 20°C rise | 40°C rise | ± 0.4 |
| 1 | SPRI 0808F-3R3M | 3.30 | 6.6 | 7.3 | 23.0 | 20.0 | 13.5 | 18.0 | 6.9 |
| 2 | SPRI 0808F-4R7M | 4.70 | 8.9 | 9.8 | 19.0 | 17.0 | 10.5 | 14.6 | 6.9 |
| 3 | SPRI 0808F-6R8M | 6.80 | 13.0 | 14.3 | 14.5 | 12.5 | 8.0 | 11.3 | 6.9 |
| 4 | SPRI 0808F-100M | 10.0 | 20.8 | 22.9 | 11.0 | 10.0 | 6.6 | 8.7 | 6.9 |

Note:

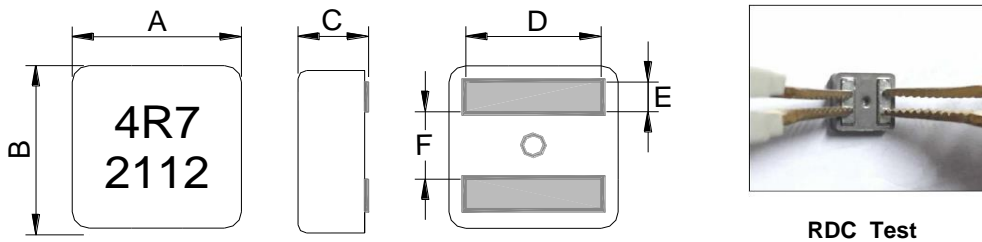
1. Test Frequency: 100KHz /0.1V
2. All test data referenced to 25°C ambient
3. Current that causes the specified temperature rise from 25°C ambient.
4. Saturation Current (Isat) will cause L0 to drop approximately 30%.
5. The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions.
Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
6. Irms Testing : Temperature rise is highly dependent on many factors including pcb land pattern, trace size, and proximity to other components. Therefore temperature rise should be verified in application conditions.
7. Rated voltage 40V DC : The application of voltage depends on many factors , Over voltage may cause components failure , high temperature , and burn-out , User needs to verify for appropriate usage.
8. Rated DC current: The lower value of Irms and Isat.



FEATURES

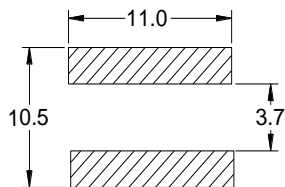
1. Low loss realized with low DCR.
2. High performance realized by metal dust core.
3. Ultra low buzz noise, due to composite construction.
4. 100% Lead(Pb)-Free and RoHS compliant.

DIMENSIONS (mm)



Marking: Black.4R7and 2112 (21 YY,12 WW, follow production date)

Recommend PC Board Pattern



Note:

1. PCB layout is referred to standard IPC-7351B
2. The above PCB layout reference only.
3. Recommend solder paste thickness at 0.15mm and above.

| Part No. | A | B | Size (mm) | | | |
|------------|------------|------------|-----------|----------------|-----------|-----------|
| | | | C | D | E | F |
| SRPI 1006F | 11.9 ± 0.3 | 11.0 ± 0.3 | 5.7 ± 0.3 | See spec table | 2.4 ± 0.2 | 4.5 ± 0.3 |
| SRPI 1010F | 11.9 ± 0.3 | 11.0 ± 0.3 | 9.7 ± 0.3 | See Spec table | 2.4 ± 0.2 | 4.4 ± 0.3 |

■ SERIES LIST

| No. | Part No. | L | RDC | | Isat | | Irms | | D |
|-----|-----------------|--------------------------|---------------|-------|------|------|-----------|-----------|-----------|
| | | (μ H) $\pm 20\%$ | (m Ω) | | (A) | | (A) Typ. | | (mm) |
| | | | Typ. | Max. | Typ. | Max. | 20°C rise | 40°C rise | ± 0.5 |
| 1 | SPRI 1006F-2R2M | 2.20 | 4.40 | 4.84 | 35.0 | 30.0 | 14.0 | 20.0 | 9.0 |
| 2 | SPRI 1006F-3R3M | 3.30 | 7.00 | 7.70 | 28.0 | 25.0 | 11.4 | 16.8 | 9.0 |
| 3 | SPRI 1006F-4R7M | 4.70 | 9.70 | 10.72 | 25.0 | 22.0 | 8.7 | 14.0 | 9.0 |
| 4 | SPRI 1006F-5R6M | 5.60 | 10.80 | 11.90 | 20.0 | 17.0 | 7.0 | 12.0 | 8.8 |
| 5 | SPRI 1006F-6R8M | 6.80 | 11.80 | 13.00 | 18.0 | 15.5 | 6.0 | 10.5 | 8.8 |
| 6 | SPRI 1006F-8R2M | 8.20 | 15.00 | 16.50 | 16.5 | 14.0 | 5.0 | 9.5 | 8.8 |
| 7 | SPRI 1006F-100M | 10.0 | 16.50 | 18.20 | 15.0 | 13.0 | 4.5 | 9.0 | 8.8 |
| 1 | SRPI 1010F-3R3M | 3.30 | 3.7 | 4.1 | 27.4 | 23.4 | 18.2 | 25.0 | 9.3 |
| 2 | SRPI 1010F-4R7M | 4.70 | 5.2 | 5.7 | 25.4 | 21.4 | 17.5 | 24.0 | 9.3 |
| 3 | SRPI 1010F-5R6M | 5.60 | 6.5 | 7.2 | 23.6 | 19.6 | 15.7 | 21.2 | 9.3 |
| 4 | SRPI 1010F-6R8M | 6.80 | 8.1 | 8.9 | 21.8 | 18.5 | 14.0 | 18.5 | 9.0 |
| 5 | SRPI 1010F-8R2M | 8.20 | 10.8 | 12.4 | 18.3 | 16.3 | 12.9 | 17.1 | 9.0 |
| 6 | SRPI 1010F-100M | 10.0 | 12.5 | 13.75 | 17.5 | 14.6 | 11.5 | 15.5 | 9.0 |
| 7 | SRPI 1010F-150M | 15.0 | 17.5 | 19.30 | 15.5 | 12.5 | 9.9 | 13.8 | 9.0 |

Note:

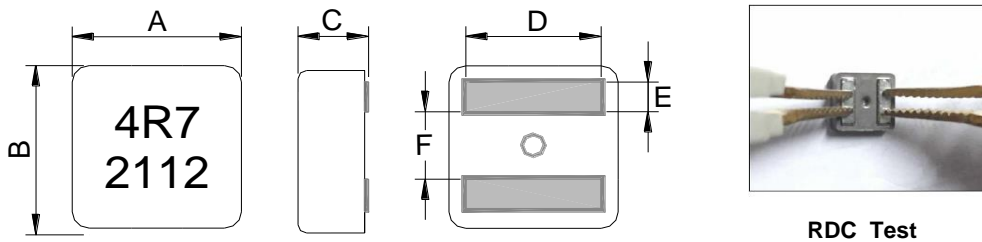
1. Test Frequency: 100KHz /0.1V
2. All test data referenced to 25°C ambient
3. Current that causes the specified temperature rise from 25°C ambient.
4. Saturation Current (Isat) will cause L0 to drop approximately 30%.
5. The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions.
Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
6. Irms Testing : Temperature rise is highly dependent on many factors including pcb land pattern, trace size, and proximity to other components. Therefore temperature rise should be verified in application conditions.
7. Rated voltage 40V DC · The application of voltage depends on many factors · Over voltage may cause components failure · high temperature · and burn-out · User needs to verify for appropriate usage.
8. Rated DC current: The lower value of Irms and Isat.



FEATURES

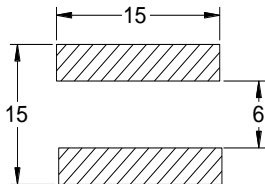
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DIMENSIONS (mm)



Marking: Black.4R7and 2112 (21 YY,12 WW, follow production date)

Recommend PC Board Pattern



Note:

1. PCB layout is referred to standard IPC-7351B
2. The above PCB layout reference only.
3. Recommend solder paste thickness at 0.15mm and above.

| Part No. | Size (mm) | | | | | |
|------------|------------|------------|------------|------------|-----------|-----------|
| | A | B | C | D | E | F |
| SRPI 1508F | 17.5 ± 0.3 | 16.5 ± 0.3 | 7.7 ± 0.3 | 13.2 ± 0.5 | 3.2 ± 0.2 | 7.0 ± 0.3 |
| SRPI 1510F | 17.5 ± 0.3 | 16.5 ± 0.3 | 9.7 ± 0.3 | 13.2 ± 0.5 | 3.2 ± 0.2 | 7.0 ± 0.3 |
| SRPI 1513F | 17.5 ± 0.3 | 16.5 ± 0.3 | 12.7 ± 0.3 | 13.2 ± 0.5 | 3.2 ± 0.2 | 7.0 ± 0.3 |

SERIES LIST

| No. | Part No. | L | RDC | | Isat | | Irms | |
|-----|-----------------|--------------------------|-------|-------|------|------|-----------|-----------|
| | | (μ H) $\pm 20\%$ | Typ. | Max. | Typ. | Max. | 20°C rise | 40°C rise |
| 1 | SRPI 1508F-2R0M | 2.00 | 1.92 | 2.21 | 57.0 | 52.0 | 29.5 | 40.0 |
| 2 | SRPI 1508F-2R2M | 2.20 | 2.15 | 2.48 | 55.0 | 49.0 | 28.0 | 37.0 |
| 3 | SRPI 1508F-3R0M | 3.00 | 2.50 | 3.00 | 46.0 | 41.0 | 26.0 | 34.5 |
| 4 | SRPI 1508F-4R2M | 4.20 | 3.90 | 4.68 | 38.0 | 33.0 | 20.5 | 27.0 |
| 5 | SRPI 1508F-4R7M | 4.70 | 4.30 | 5.16 | 37.0 | 32.0 | 20.0 | 26.5 |
| 6 | SRPI 1508F-5R3M | 5.30 | 4.45 | 5.34 | 35.0 | 31.0 | 19.5 | 26.0 |
| 7 | SRPI 1508F-6R2M | 6.20 | 5.40 | 6.50 | 34.0 | 31.0 | 17.0 | 23.0 |
| 8 | SRPI 1508F-7R2M | 7.20 | 6.00 | 7.20 | 32.0 | 29.0 | 15.0 | 21.0 |
| 9 | SRPI 1508F-8R2M | 8.20 | 6.60 | 7.92 | 28.0 | 25.0 | 13.0 | 19.0 |
| 10 | SRPI 1508F-100M | 10.0 | 8.00 | 9.60 | 24.0 | 21.0 | 11.0 | 16.0 |
| 11 | SRPI 1508F-150M | 15.0 | 12.5 | 15.0 | 21.0 | 18.0 | 10.0 | 13.0 |
| 12 | SRPI 1508F-220M | 22.0 | 19.3 | 23.2 | 19.0 | 16.0 | 9.0 | 12.0 |
| 1 | SRPI 1510F-4R7M | 4.70 | 3.40 | 3.80 | 43.0 | 39.0 | 22.0 | 30.0 |
| 2 | SRPI 1510F-5R6M | 5.60 | 3.82 | 4.20 | 38.0 | 34.0 | 21.0 | 28.0 |
| 3 | SRPI 1510F-6R8M | 6.80 | 4.18 | 4.60 | 36.0 | 31.0 | 20.0 | 26.0 |
| 4 | SRPI 1510F-8R2M | 8.20 | 6.00 | 7.20 | 32.0 | 28.0 | 19.0 | 25.0 |
| 5 | SRPI 1510F-100M | 10.0 | 7.10 | 8.60 | 29.0 | 26.0 | 18.0 | 24.0 |
| 6 | SRPI 1510F-150M | 15.0 | 9.20 | 11.50 | 23.0 | 20.0 | 14.0 | 18.0 |
| 7 | SRPI 1510F-220M | 22.0 | 13.20 | 15.80 | 20.0 | 18.0 | 11.0 | 16.0 |
| 8 | SRPI 1510F-330M | 33.0 | 18.70 | 20.00 | 18.7 | 16.7 | 9.0 | 13.0 |
| 1 | SRPI 1513F-4R7M | 4.70 | 3.0 | 3.3 | 44.0 | 40.0 | 23.0 | 31.0 |
| 2 | SRPI 1513F-5R6M | 5.60 | 3.5 | 3.9 | 40.0 | 35.0 | 22.0 | 29.0 |
| 3 | SRPI 1513F-6R8M | 6.80 | 3.8 | 4.2 | 37.0 | 32.0 | 21.0 | 27.0 |
| 4 | SRPI 1513F-8R2M | 8.20 | 5.1 | 5.74 | 33.0 | 29.0 | 20.0 | 26.0 |
| 5 | SRPI 1513F-100M | 10.0 | 6.3 | 7.0 | 30.0 | 27.0 | 19.0 | 25.0 |
| 6 | SRPI 1513F-150M | 15.0 | 6.8 | 7.5 | 25.5 | 21.0 | 16.0 | 22.0 |
| 7 | SRPI 1513F-220M | 22.0 | 12.6 | 13.86 | 22.0 | 19.0 | 12.0 | 17.0 |
| 8 | SRPI 1513F-330M | 33.0 | 18.5 | 22.2 | 19.0 | 16.0 | 9.0 | 14.0 |

Note:

1. Test Frequency: 100KHz /0.1V
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