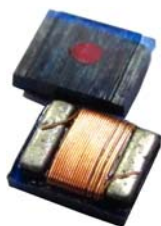


## LT Series



LT series is the newest open type ferrite wire wound chip inductors. This wire wound ferrite construction supports thinness for low profile application.

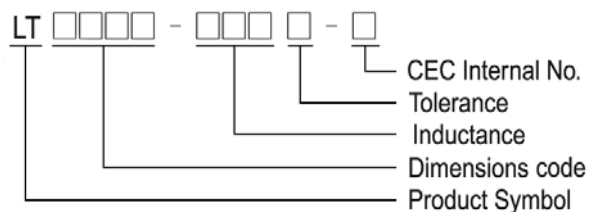
### Features

- RoHS compliant
- At just 1.05mm in height, these are one of Chilisin's lowest profile surface mount inductors
- Wire wound ferrite design supports lower Rdc, higher current ratings and exceptional Q values
- Inductance values from 0.12 to 39uH

### Applications

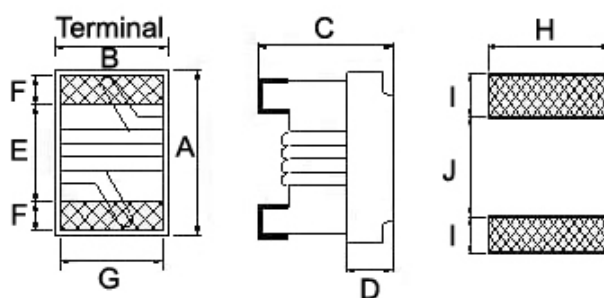
- Boost IC for tiny panels of C-STN, TFT-LCD and OLED in backlight
- Buck/Boost IC using in DC to DC converter
- LC filter in power as well as signal lines

### Product Identification



### Shape and Dimensions / Recommended Pattern

**LT0805/1210**



Dimensions in mm

| TYPE   | A Max | B Max | C Max | D Ref | E    | F    | G    | H    | I    | J    |
|--------|-------|-------|-------|-------|------|------|------|------|------|------|
| LT0805 | 2.40  | 1.85  | 1.05  | 0.70  | 1.02 | 0.50 | 1.27 | 1.78 | 1.02 | 0.76 |
| LT1210 | 3.75  | 3.10  | 1.05  | 0.65  | 1.80 | 0.65 | 2.35 | 2.70 | 1.00 | 2.00 |

## SMD Wire Wound Ferrite Chip Inductors - LT Series

### Electrical Characteristics

| Part Number   | Inductance<br>( $\mu$ H) | Test<br>Frequency<br>(MHz) | Tolerance<br>( $\pm$ %) | Q<br>Min | SRF<br>(MHz) Min | Rdc<br>( $\Omega$ )Max | Idc<br>(mA) Max | Color  |
|---------------|--------------------------|----------------------------|-------------------------|----------|------------------|------------------------|-----------------|--------|
| LT0805-R12□-N | 0.12                     | 25.2                       | 10 / 5                  | 22       | 1500             | 0.33                   | 1200            | Black  |
| LT0805-R15□-N | 0.15                     | 25.2                       | 10 / 5                  | 22       | 1100             | 0.33                   | 1200            | Brown  |
| LT0805-R18□-N | 0.18                     | 25.2                       | 10 / 5                  | 22       | 1100             | 0.36                   | 1100            | Red    |
| LT0805-R22□-N | 0.22                     | 25.2                       | 10 / 5                  | 22       | 1100             | 0.39                   | 1100            | Orange |
| LT0805-R27□-N | 0.27                     | 25.2                       | 10 / 5                  | 22       | 950              | 0.43                   | 1050            | Yellow |
| LT0805-R33□-N | 0.33                     | 25.2                       | 10 / 5                  | 22       | 650              | 0.46                   | 900             | Green  |
| LT0805-R39□-N | 0.39                     | 25.2                       | 10 / 5                  | 22       | 640              | 0.48                   | 850             | Blue   |
| LT0805-R47□-N | 0.47                     | 25.2                       | 10 / 5                  | 22       | 570              | 0.65                   | 800             | Violet |
| LT0805-R56□-N | 0.56                     | 25.2                       | 10 / 5                  | 22       | 540              | 0.67                   | 770             | Gray   |
| LT0805-R68□-N | 0.68                     | 25.2                       | 10 / 5                  | 22       | 500              | 0.73                   | 750             | White  |
| LT0805-R82□-N | 0.82                     | 25.2                       | 10 / 5                  | 22       | 480              | 0.85                   | 730             | Black  |
| LT0805-1R0□-N | 1.0                      | 7.96                       | 10 / 5                  | 15       | 470              | 0.87                   | 720             | Brown  |
| LT0805-1R2□-N | 1.2                      | 7.96                       | 10 / 5                  | 15       | 450              | 0.97                   | 690             | Red    |
| LT0805-1R5□-N | 1.5                      | 7.96                       | 10 / 5                  | 15       | 400              | 1.10                   | 670             | Orange |
| LT0805-1R8□-N | 1.8                      | 7.96                       | 10 / 5                  | 15       | 340              | 1.15                   | 650             | Yellow |
| LT0805-2R2□-N | 2.2                      | 7.96                       | 10 / 5                  | 15       | 265              | 1.28                   | 630             | Green  |
| LT0805-2R7□-N | 2.7                      | 7.96                       | 10 / 5                  | 15       | 235              | 1.40                   | 620             | Blue   |
| LT0805-3R3□-N | 3.3                      | 7.96                       | 10 / 5                  | 15       | 190              | 1.62                   | 580             | Violet |
| LT0805-3R9□-N | 3.9                      | 7.96                       | 10 / 5                  | 15       | 180              | 1.75                   | 570             | Gray   |
| LT0805-4R7□-N | 4.7                      | 7.96                       | 10 / 5                  | 13       | 160              | 1.95                   | 550             | White  |
| LT0805-5R6□-N | 5.6                      | 7.96                       | 10 / 5                  | 15       | 120              | 2.14                   | 540             | Black  |
| LT0805-6R8□-N | 6.8                      | 7.96                       | 10 / 5                  | 15       | 45               | 2.28                   | 520             | Brown  |
| LT0805-8R2□-N | 8.2                      | 7.96                       | 10 / 5                  | 15       | 42               | 2.55                   | 500             | Red    |
| LT0805-100□-N | 10                       | 2.52                       | 10 / 5                  | 10       | 38               | 2.70                   | 450             | Orange |
| LT0805-120□-N | 12                       | 2.52                       | 10 / 5                  | 10       | 33               | 4.20                   | 400             | Yellow |
| LT0805-150□-N | 15                       | 2.52                       | 10 / 5                  | 10       | 30               | 4.80                   | 380             | Green  |
| LT0805-180□-N | 18                       | 2.52                       | 10 / 5                  | 10       | 25               | 5.74                   | 300             | Blue   |
| LT0805-220□-N | 22                       | 2.52                       | 10 / 5                  | 10       | 23               | 7.75                   | 260             | Violet |
| LT0805-270□-N | 27                       | 2.52                       | 10 / 5                  | 10       | 21               | 10.0                   | 230             | Gray   |
| LT0805-330□-N | 33                       | 2.52                       | 10 / 5                  | 10       | 16               | 13.5                   | 200             | White  |
| LT0805-390□-N | 39                       | 2.52                       | 10 / 5                  | 10       | 15               | 16.0                   | 190             | Black  |

- When ordering, please specify tolerance and packaging codes.
- Tolerance : J =  $\pm 5\%$  , K =  $\pm 10\%$
- L , Q : Agilent E4991A + Agilent HP16197A
- SRF : Agilent E4991A
- Rdc : CH502BC/ HP4338B
- Idc for Inductance drop 10% from its value without current.
- Operating temperature range from -25°C to 105°C. (Including self - temperature rise)

## SMD Wire Wound Ferrite Chip Inductors - LT Series

### Electrical Characteristics

| Part Number   | Inductance<br>( $\mu$ H) | Test<br>Frequency<br>(MHz) | Tolerance<br>( $\pm$ %) | Q<br>Typ. | SRF<br>(MHz) Min | Rdc<br>( $\Omega$ ) Max | Idc<br>(mA) Max | Color Coding    |                 |                 |
|---------------|--------------------------|----------------------------|-------------------------|-----------|------------------|-------------------------|-----------------|-----------------|-----------------|-----------------|
|               |                          |                            |                         |           |                  |                         |                 | 1 <sup>ST</sup> | 2 <sup>ND</sup> | 3 <sup>RD</sup> |
| LT1210-1R0□-N | 1.0                      | 7.96                       | 10 / 5                  | 20        | 350              | 0.45                    | 1500            | Brown           | Black           | Red             |
| LT1210-1R2□-N | 1.2                      | 7.96                       | 10 / 5                  | 20        | 330              | 0.49                    | 1300            | Brown           | Red             | Red             |
| LT1210-1R5□-N | 1.5                      | 7.96                       | 10 / 5                  | 20        | 310              | 0.68                    | 1200            | Brown           | Green           | Red             |
| LT1210-1R8□-N | 1.8                      | 7.96                       | 10 / 5                  | 20        | 290              | 0.72                    | 1150            | Brown           | Gray            | Red             |
| LT1210-2R2□-N | 2.2                      | 7.96                       | 10 / 5                  | 20        | 270              | 1.02                    | 1020            | Red             | Red             | Red             |
| LT1210-2R7□-N | 2.7                      | 7.96                       | 10 / 5                  | 20        | 265              | 1.15                    | 1000            | Red             | Violet          | Red             |
| LT1210-3R3□-N | 3.3                      | 7.96                       | 10 / 5                  | 20        | 195              | 1.20                    | 970             | Orange          | Orange          | Red             |
| LT1210-3R9□-N | 3.9                      | 7.96                       | 10 / 5                  | 20        | 170              | 1.35                    | 910             | Orange          | White           | Red             |
| LT1210-4R7□-N | 4.7                      | 7.96                       | 10 / 5                  | 20        | 155              | 1.48                    | 880             | Yellow          | Violet          | Red             |
| LT1210-5R6□-N | 5.6                      | 7.96                       | 10 / 5                  | 20        | 125              | 1.65                    | 820             | Green           | Blue            | Red             |
| LT1210-6R8□-N | 6.8                      | 7.96                       | 10 / 5                  | 20        | 110              | 1.68                    | 750             | Blue            | Gray            | Red             |
| LT1210-8R2□-N | 8.2                      | 7.96                       | 10 / 5                  | 20        | 100              | 1.88                    | 700             | Gray            | Red             | Red             |
| LT1210-100□-N | 10                       | 2.52                       | 10 / 5                  | 16        | 85               | 2.90                    | 610             | Brown           | Black           | Orange          |
| LT1210-120□-N | 12                       | 2.52                       | 10 / 5                  | 16        | 70               | 3.05                    | 540             | Brown           | Red             | Orange          |
| LT1210-150□-N | 15                       | 2.52                       | 10 / 5                  | 16        | 65               | 3.45                    | 500             | Brown           | Green           | Orange          |
| LT1210-180□-N | 18                       | 2.52                       | 10 / 5                  | 16        | 55               | 4.79                    | 420             | Brown           | Gray            | Orange          |
| LT1210-220□-N | 22                       | 2.52                       | 10 / 5                  | 16        | 50               | 5.20                    | 350             | Red             | Red             | Orange          |

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