

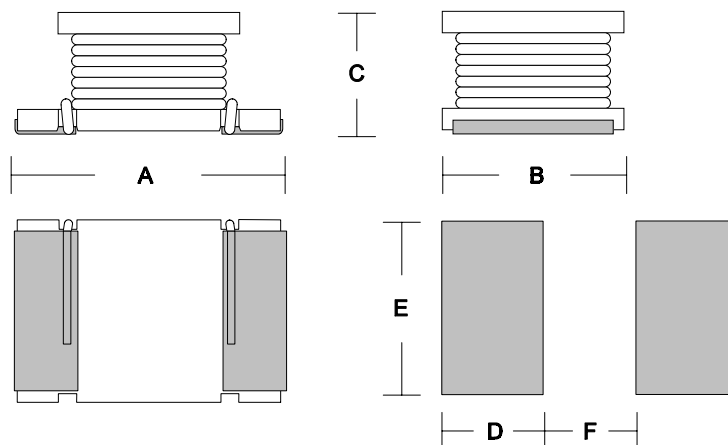
## LNQ Series

- 2 Package Sizes
- High 'Q'
- Wide Inductance Range
- Low dcR
- Typical Reel Size 2000pcs



The **LNQ** series comes in two sizes approximate to EIA packages 1210, and 1812. Suitable applications include:- Pagers, Cordless Phones, Portable GPS, Remote Metering and Sensors where optimum battery performance is required.

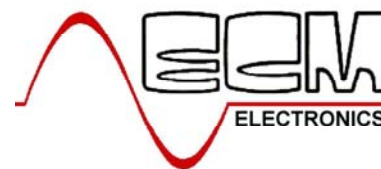
### COMPONENT OUTLINE



### DIMENSIONS

| ECM Type | Inductance Range | A (mm) | B    | C    | D    | E    | F    |
|----------|------------------|--------|------|------|------|------|------|
| LNQ32T   | 0.1uH~560uH      | 3.20   | 2.50 | 2.00 | 1.50 | 2.00 | 1.00 |
| LNQ45T   | 1.0uH~2.2mH      | 4.50   | 3.20 | 2.60 | 2.00 | 3.00 | 1.20 |

# ECM SMD Ferrite Chip Inductors



| <b>ECM<br/>Part</b> | <b>L<br/>(<math>\mu</math>H)</b> | <b>Tol<br/>%</b> | <b>Q Min.<br/>@ MHz</b> | <b>SRF<br/>Min.<br/>(MHz)</b> | <b>R<sub>DC</sub><br/>MAX<br/>(<math>\Omega</math>)</b> | <b>I<sub>DC</sub><br/>I<sub>N</sub><br/>(mA)</b> |
|---------------------|----------------------------------|------------------|-------------------------|-------------------------------|---------------------------------------------------------|--------------------------------------------------|
|---------------------|----------------------------------|------------------|-------------------------|-------------------------------|---------------------------------------------------------|--------------------------------------------------|

## LNQ32T Series (1210)

|            |             |     |               |     |      |     |
|------------|-------------|-----|---------------|-----|------|-----|
| LNQ32T-R10 | 0.10 @ 1MHz | M   | 20 @ 25.2MHz  | 200 | 0.25 | 700 |
| LNQ32T-R18 | 0.18 @ 1MHz | M   | 20 @ 25.2MHz  | 200 | 0.25 | 650 |
| LNQ32T-R27 | 0.27 @ 1MHz | M   | 25 @ 25.2MHz  | 200 | 0.25 | 600 |
| LNQ32T-R39 | 0.39 @ 1MHz | M   | 25 @ 25.2MHz  | 200 | 0.25 | 530 |
| LNQ32T-R56 | 0.56 @ 1MHz | M   | 30 @ 25.2MHz  | 160 | 0.25 | 530 |
| LNQ32T-R68 | 0.68 @ 1MHz | M   | 30 @ 25.2MHz  | 160 | 0.25 | 470 |
| LNQ32T-R82 | 0.82 @ 1MHz | M   | 30 @ 25.2MHz  | 120 | 0.25 | 450 |
| LNQ32T-1R0 | 1.0 @ 1MHz  | M   | 20 @ 1MHz     | 100 | 0.50 | 445 |
| LNQ32T-1R2 | 1.2 @ 1MHz  | M   | 20 @ 1MHz     | 100 | 0.60 | 425 |
| LNQ32T-1R5 | 1.5 @ 1MHz  | M,K | 20 @ 1MHz     | 75  | 0.60 | 400 |
| LNQ32T-1R8 | 1.8 @ 1MHz  | M,K | 20 @ 1MHz     | 60  | 0.70 | 390 |
| LNQ32T-2R2 | 2.2 @ 1MHz  | M,K | 20 @ 1MHz     | 50  | 0.80 | 370 |
| LNQ32T-2R7 | 2.7 @ 1MHz  | M,K | 20 @ 1MHz     | 43  | 0.90 | 320 |
| LNQ32T-3R3 | 3.3 @ 1MHz  | M,K | 20 @ 1MHz     | 38  | 1.0  | 300 |
| LNQ32T-3R9 | 3.9 @ 1MHz  | M,K | 20 @ 1MHz     | 35  | 1.1  | 290 |
| LNQ32T-4R7 | 4.7 @ 1MHz  | M,K | 20 @ 1MHz     | 31  | 1.2  | 270 |
| LNQ32T-5R6 | 5.6 @ 1MHz  | M,K | 20 @ 1MHz     | 28  | 1.3  | 250 |
| LNQ32T-6R8 | 6.8 @ 1MHz  | M,K | 20 @ 1MHz     | 25  | 1.5  | 240 |
| LNQ32T-8R2 | 8.2 @ 1MHz  | M,K | 20 @ 1MHz     | 23  | 1.6  | 225 |
| LNQ32T-100 | 10 @ 1MHz   | K,J | 35 @ 1MHz     | 20  | 1.8  | 190 |
| LNQ32T-120 | 12 @ 1MHz   | K,J | 35 @ 1MHz     | 18  | 2.0  | 180 |
| LNQ32T-150 | 15 @ 1MHz   | K,J | 35 @ 1MHz     | 16  | 2.2  | 170 |
| LNQ32T-180 | 18 @ 1MHz   | K,J | 35 @ 1MHz     | 15  | 2.5  | 165 |
| LNQ32T-220 | 22 @ 1MHz   | K,J | 35 @ 1MHz     | 14  | 2.8  | 150 |
| LNQ32T-270 | 27 @ 1MHz   | K,J | 35 @ 1MHz     | 13  | 3.1  | 125 |
| LNQ32T-330 | 33 @ 1MHz   | K,J | 40 @ 1MHz     | 12  | 3.5  | 115 |
| LNQ32T-390 | 39 @ 1MHz   | K,J | 40 @ 1MHz     | 11  | 3.9  | 110 |
| LNQ32T-470 | 47 @ 1MHz   | K,J | 40 @ 1MHz     | 11  | 4.3  | 100 |
| LNQ32T-560 | 56 @ 1MHz   | K,J | 40 @ 1MHz     | 10  | 4.9  | 85  |
| LNQ32T-680 | 68 @ 1MHz   | K,J | 40 @ 1MHz     | 9   | 5.5  | 80  |
| LNQ32T-820 | 82 @ 1MHz   | K,J | 40 @ 1MHz     | 8   | 6.2  | 70  |
| LNQ32T-101 | 100 @ 1MHz  | K,J | 40 @ 0.796MHz | 8   | 7.0  | 80  |
| LNQ32T-121 | 120 @ 1MHz  | K,J | 40 @ 0.796MHz | 7   | 8.0  | 75  |
| LNQ32T-151 | 150 @ 1MHz  | K,J | 40 @ 0.796MHz | 7   | 9.3  | 70  |
| LNQ32T-181 | 180 @ 1MHz  | K,J | 40 @ 0.796MHz | 6   | 10.2 | 65  |

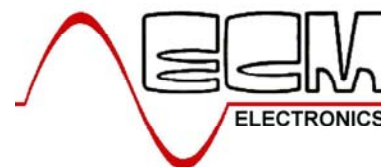
**TOLERANCES J=5%, K=10%, M=20%.**

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Tel: +44(0)1903 892810: Fax: +44(0)1903 892738. Email: [ecm@ecmelectronics.co.uk](mailto:ecm@ecmelectronics.co.uk)

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Issue 1

# ECM SMD Ferrite Chip Inductors



| <b>ECM<br/>Part</b> | <b>L<br/>(<math>\mu</math>H)</b> | <b>Tol<br/>%</b> | <b>Q Min.<br/>(**MHz)</b> | <b>SRF<br/>Min.<br/>(MHz)</b> | <b>R<sub>DC</sub><br/>MAX<br/>(<math>\Omega</math>)</b> | <b>I<sub>DC</sub><br/>I<sub>N</sub><br/>(Ma)</b> |
|---------------------|----------------------------------|------------------|---------------------------|-------------------------------|---------------------------------------------------------|--------------------------------------------------|
|---------------------|----------------------------------|------------------|---------------------------|-------------------------------|---------------------------------------------------------|--------------------------------------------------|

## LNQ32T Series (1210) Continued...

|            |            |     |               |   |      |    |
|------------|------------|-----|---------------|---|------|----|
| LNQ32T-221 | 220 @ 1MHz | K,J | 40 @ 0.796MHz | 6 | 11.8 | 65 |
| LNQ32T-271 | 270 @ 1MHz | K,J | 40 @ 0.796MHz | 5 | 12.5 | 65 |
| LNQ32T-331 | 330 @ 1MHz | K,J | 40 @ 0.796MHz | 5 | 13.0 | 65 |
| LNQ32T-391 | 390 @ 1MHz | K,J | 50 @ 0.796MHz | 5 | 22.0 | 50 |
| LNQ32T-471 | 470 @ 1kHz | K,J | 50 @ 0.796MHz | 5 | 25.0 | 45 |
| LNQ32T-561 | 560 @ 1kHz | K,J | 50 @ 0.796MHz | 5 | 28.0 | 40 |

## LNQ45T Series (1812)

|            |            |     |               |     |      |     |
|------------|------------|-----|---------------|-----|------|-----|
| LNQ45T-1R0 | 1.0 @ 1MHz | M   | 20 @ 1MHz     | 120 | 0.20 | 500 |
| LNQ45T-1R2 | 1.2 @ 1MHz | M   | 20 @ 1MHz     | 100 | 0.20 | 500 |
| LNQ45T-1R5 | 1.5 @ 1MHz | M   | 20 @ 1MHz     | 85  | 0.30 | 500 |
| LNQ45T-1R8 | 1.8 @ 1MHz | M   | 20 @ 1MHz     | 75  | 0.30 | 500 |
| LNQ45T-2R2 | 2.2 @ 1MHz | M   | 20 @ 1MHz     | 62  | 0.30 | 500 |
| LNQ45T-2R7 | 2.7 @ 1MHz | M   | 20 @ 1MHz     | 53  | 0.32 | 500 |
| LNQ45T-3R3 | 3.3 @ 1MHz | M   | 20 @ 1MHz     | 47  | 0.35 | 500 |
| LNQ45T-3R9 | 3.9 @ 1MHz | M   | 20 @ 1MHz     | 41  | 0.38 | 500 |
| LNQ45T-4R7 | 4.7 @ 1MHz | M,K | 30 @ 1MHz     | 38  | 0.40 | 500 |
| LNQ45T-5R6 | 5.6 @ 1MHz | M,K | 30 @ 1MHz     | 33  | 0.47 | 500 |
| LNQ45T-6R8 | 6.8 @ 1MHz | M,K | 30 @ 1MHz     | 31  | 0.50 | 450 |
| LNQ45T-8R2 | 8.2 @ 1MHz | M,K | 30 @ 1MHz     | 27  | 0.56 | 450 |
| LNQ45T-100 | 10 @ 1MHz  | K,J | 35 @ 1MHz     | 23  | 0.56 | 400 |
| LNQ45T-120 | 12 @ 1MHz  | K,J | 35 @ 1MHz     | 21  | 0.62 | 380 |
| LNQ45T-150 | 15 @ 1MHz  | K,J | 35 @ 1MHz     | 19  | 0.73 | 360 |
| LNQ45T-180 | 18 @ 1MHz  | K,J | 35 @ 1MHz     | 17  | 0.82 | 340 |
| LNQ45T-220 | 22 @ 1MHz  | K,J | 35 @ 1MHz     | 15  | 0.94 | 320 |
| LNQ45T-270 | 27 @ 1MHz  | K,J | 35 @ 1MHz     | 14  | 1.1  | 300 |
| LNQ45T-330 | 33 @ 1MHz  | K,J | 35 @ 1MHz     | 12  | 1.2  | 270 |
| LNQ45T-390 | 39 @ 1MHz  | K,J | 35 @ 1MHz     | 11  | 1.4  | 240 |
| LNQ45T-470 | 47 @ 1MHz  | K,J | 35 @ 1MHz     | 10  | 1.5  | 220 |
| LNQ45T-560 | 56 @ 1MHz  | K,J | 35 @ 1MHz     | 9   | 1.7  | 200 |
| LNQ45T-680 | 68 @ 1MHz  | K,J | 35 @ 1MHz     | 8   | 1.9  | 180 |
| LNQ45T-820 | 82 @ 1MHz  | K,J | 35 @ 1MHz     | 7   | 2.2  | 170 |
| LNQ45T-101 | 100 @ 1MHz | K,J | 40 @ 0.796MHz | 6   | 2.5  | 160 |
| LNQ45T-121 | 120 @ 1MHz | K,J | 40 @ 0.796MHz | 6   | 3.0  | 150 |

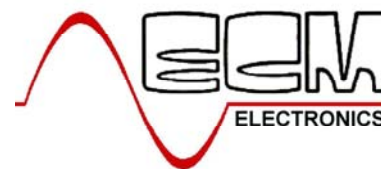
**TOLERANCES J=5%, K=10%, M=20%.**

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Issue 1

# ECM SMD Ferrite Chip Inductors



| <b>ECM<br/>Part</b> | <b>L<br/>(<math>\mu</math>H)</b> | <b>Tol<br/>%</b> | <b>Q Min.<br/>(**MHz)</b> | <b>SRF<br/>Min.<br/>(MHz)</b> | <b>R<sub>DC</sub><br/>MAX<br/>(<math>\Omega</math>)</b> | <b>I<sub>DC</sub><br/>I<sub>N</sub><br/>(mA)</b> |
|---------------------|----------------------------------|------------------|---------------------------|-------------------------------|---------------------------------------------------------|--------------------------------------------------|
|---------------------|----------------------------------|------------------|---------------------------|-------------------------------|---------------------------------------------------------|--------------------------------------------------|

## LNQ45T Series (1812) Continued...

|            |             |     |               |   |      |     |
|------------|-------------|-----|---------------|---|------|-----|
| LNQ45T-151 | 150 @ 1MHz  | K,J | 40 @ 0.796MHz | 5 | 3.7  | 130 |
| LNQ45T-181 | 180 @ 1MHz  | K,J | 40 @ 0.796MHz | 5 | 4.5  | 120 |
| LNQ45T-221 | 220 @ 1MHz  | K,J | 40 @ 0.796MHz | 4 | 5.4  | 110 |
| LNQ45T-271 | 270 @ 1MHz  | K,J | 40 @ 0.796MHz | 4 | 6.8  | 100 |
| LNQ45T-331 | 330 @ 1MHz  | K,J | 40 @ 0.796MHz | 3 | 8.2  | 95  |
| LNQ45T-391 | 390 @ 1MHz  | K,J | 40 @ 0.796MHz | 3 | 9.7  | 90  |
| LNQ45T-471 | 470 @ 1kHz  | K,J | 40 @ 0.796MHz | 3 | 11.8 | 80  |
| LNQ45T-561 | 560 @ 1kHz  | K,J | 40 @ 0.796MHz | 2 | 14.5 | 70  |
| LNQ45T-681 | 680 @ 1kHz  | K,J | 40 @ 0.796MHz | 2 | 17.0 | 65  |
| LNQ45T-821 | 820 @ 1kHz  | K,J | 40 @ 0.796MHz | 2 | 20.5 | 60  |
| LNQ45T-102 | 1000 @ 1kHz | K,J | 40 @ 0.252MHz | 2 | 25.0 | 50  |
| LNQ45T-122 | 1200 @ 1kHz | K,J | 40 @ 0.252MHz | 2 | 30.0 | 45  |
| LNQ45T-152 | 1500 @ 1kHz | K,J | 40 @ 0.252MHz | 1 | 37.0 | 40  |
| LNQ45T-182 | 1800 @ 1kHz | K,J | 40 @ 0.252MHz | 1 | 45.0 | 35  |
| LNQ45T-222 | 2200 @ 1kHz | K,J | 40 @ 0.252MHz | 1 | 50.0 | 30  |

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