# **Data Sheet**

# LQH32MN\_23 Series 1210/3225 (inch/mm)





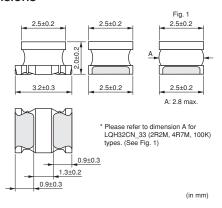








### Dimensions



### Packaging

| Code | Packaging              | Minimum Quantity |  |  |
|------|------------------------|------------------|--|--|
| L    | ø180mm Embossed Taping | 2000             |  |  |
| K    | ø330mm Embossed Taping | 7500             |  |  |

# ■ Rated Value (□: packaging code)

| Part Number    | Inductance | Inductance<br>Test Frequency | Rated Current | Max. of DC Resistance | Q (min.) | Q Test Frequency | Self-Resonance<br>Frequency (min.) |
|----------------|------------|------------------------------|---------------|-----------------------|----------|------------------|------------------------------------|
| LQH32MN1R0M23□ | 1.0µH ±20% | 1MHz                         | 445mA         | 0.5Ω                  | 20       | 1MHz             | 100MHz                             |
| LQH32MN1R2M23□ | 1.2µH ±20% | 1MHz                         | 425mA         | 0.6Ω                  | 20       | 1MHz             | 100MHz                             |
| LQH32MN1R5K23□ | 1.5µH ±10% | 1MHz                         | 400mA         | 0.6Ω                  | 20       | 1MHz             | 75MHz                              |
| LQH32MN1R8K23□ | 1.8µH ±10% | 1MHz                         | 390mA         | 0.7Ω                  | 20       | 1MHz             | 60MHz                              |
| LQH32MN2R2K23□ | 2.2µH ±10% | 1MHz                         | 370mA         | 0.8Ω                  | 20       | 1MHz             | 50MHz                              |
| LQH32MN2R7K23□ | 2.7µH ±10% | 1MHz                         | 320mA         | 0.9Ω                  | 20       | 1MHz             | 43MHz                              |
| LQH32MN3R3K23□ | 3.3µH ±10% | 1MHz                         | 300mA         | 1.0Ω                  | 20       | 1MHz             | 38MHz                              |
| LQH32MN3R9K23□ | 3.9µH ±10% | 1MHz                         | 290mA         | 1.1Ω                  | 20       | 1MHz             | 35MHz                              |
| LQH32MN4R7K23□ | 4.7µH ±10% | 1MHz                         | 270mA         | 1.2Ω                  | 20       | 1MHz             | 31MHz                              |
| LQH32MN5R6K23□ | 5.6µH ±10% | 1MHz                         | 250mA         | 1.3Ω                  | 20       | 1MHz             | 28MHz                              |
| LQH32MN6R8K23□ | 6.8µH ±10% | 1MHz                         | 240mA         | 1.5Ω                  | 20       | 1MHz             | 25MHz                              |
| LQH32MN8R2K23□ | 8.2µH ±10% | 1MHz                         | 225mA         | 1.6Ω                  | 20       | 1MHz             | 23MHz                              |
| LQH32MN100J23□ | 10µH ±5%   | 1MHz                         | 190mA         | 1.8Ω                  | 35       | 1MHz             | 20MHz                              |
| LQH32MN100K23□ | 10µH ±10%  | 1MHz                         | 190mA         | 1.8Ω                  | 35       | 1MHz             | 20MHz                              |
| LQH32MN120J23□ | 12µH ±5%   | 1MHz                         | 180mA         | 2.0Ω                  | 35       | 1MHz             | 18MHz                              |
| LQH32MN120K23□ | 12µH ±10%  | 1MHz                         | 180mA         | 2.0Ω                  | 35       | 1MHz             | 18MHz                              |
| LQH32MN150J23□ | 15µH ±5%   | 1MHz                         | 170mA         | 2.2Ω                  | 35       | 1MHz             | 16MHz                              |
| LQH32MN150K23□ | 15µH ±10%  | 1MHz                         | 170mA         | 2.2Ω                  | 35       | 1MHz             | 16MHz                              |
| LQH32MN180J23□ | 18µH ±5%   | 1MHz                         | 165mA         | 2.5Ω                  | 35       | 1MHz             | 15MHz                              |
| LQH32MN180K23□ | 18µH ±10%  | 1MHz                         | 165mA         | 2.5Ω                  | 35       | 1MHz             | 15MHz                              |
| LQH32MN220J23□ | 22µH ±5%   | 1MHz                         | 150mA         | 2.8Ω                  | 35       | 1MHz             | 14MHz                              |
| LQH32MN220K23□ | 22µH ±10%  | 1MHz                         | 150mA         | 2.8Ω                  | 35       | 1MHz             | 14MHz                              |
| LQH32MN270J23□ | 27µH ±5%   | 1MHz                         | 125mA         | 3.1Ω                  | 35       | 1MHz             | 13MHz                              |
| LQH32MN270K23□ | 27µH ±10%  | 1MHz                         | 125mA         | 3.1Ω                  | 35       | 1MHz             | 13MHz                              |
| LQH32MN330J23□ | 33µH ±5%   | 1MHz                         | 115mA         | 3.5Ω                  | 40       | 1MHz             | 12MHz                              |

Class of Magnetic Shield: No magnetic shield

Operating Temperature Range (Self-temperature rise is not included): -40~85°C

Continued on the following page.



This data sheet is applied for INDUCTORS (COILS) used for General Electronics equipment for your design.

- 1. This datasheet is downloaded from the website of Murata Manufacturing co., Itd. Therefore, it's specifications are subject to change or our products in it may be discontinued without advance notice. Please check with our sales representatives or product engineers before ordering.
- 2. This datasheet has only typical specifications because there is no space for detailed specifications. Therefore, please approve our product specifications or transact the approval sheet for product specifications before ordering.

# Data Sheet

Continued from the preceding page.

| Part Number    | Inductance | Inductance<br>Test Frequency | Rated Current | Max. of DC Resistance | Q (min.) | Q Test Frequency | Self-Resonance<br>Frequency (min.) |
|----------------|------------|------------------------------|---------------|-----------------------|----------|------------------|------------------------------------|
| LQH32MN330K23□ | 33µH ±10%  | 1MHz                         | 115mA         | 3.5Ω                  | 40       | 1MHz             | 12MHz                              |
| LQH32MN390J23□ | 39µH ±5%   | 1MHz                         | 110mA         | 3.9Ω                  | 40       | 1MHz             | 11MHz                              |
| LQH32MN390K23□ | 39µH ±10%  | 1MHz                         | 110mA         | 3.9Ω                  | 40       | 1MHz             | 11MHz                              |
| LQH32MN470J23□ | 47μH ±5%   | 1MHz                         | 100mA         | 4.3Ω                  | 40       | 1MHz             | 11MHz                              |
| LQH32MN470K23□ | 47µH ±10%  | 1MHz                         | 100mA         | 4.3Ω                  | 40       | 1MHz             | 11MHz                              |
| LQH32MN560J23□ | 56µH ±5%   | 1MHz                         | 85mA          | 4.9Ω                  | 40       | 1MHz             | 10MHz                              |
| LQH32MN560K23□ | 56μH ±10%  | 1MHz                         | 85mA          | 4.9Ω                  | 40       | 1MHz             | 10MHz                              |
| LQH32MN680J23□ | 68µH ±5%   | 1MHz                         | 80mA          | 5.5Ω                  | 40       | 1MHz             | 9.0MHz                             |
| LQH32MN680K23□ | 68µH ±10%  | 1MHz                         | 80mA          | 5.5Ω                  | 40       | 1MHz             | 9.0MHz                             |
| LQH32MN820J23□ | 82µH ±5%   | 1MHz                         | 70mA          | 6.2Ω                  | 40       | 1MHz             | 8.5MHz                             |
| LQH32MN820K23□ | 82µH ±10%  | 1MHz                         | 70mA          | 6.2Ω                  | 40       | 1MHz             | 8.5MHz                             |
| LQH32MN101J23□ | 100µH ±5%  | 1MHz                         | 80mA          | 7.0Ω                  | 40       | 796kHz           | 8.0MHz                             |
| LQH32MN101K23□ | 100μH ±10% | 1MHz                         | 80mA          | 7.0Ω                  | 40       | 796kHz           | 8.0MHz                             |
| LQH32MN121J23□ | 120µH ±5%  | 1MHz                         | 75mA          | 8.0Ω                  | 40       | 796kHz           | 7.5MHz                             |
| LQH32MN121K23□ | 120µH ±10% | 1MHz                         | 75mA          | 8.0Ω                  | 40       | 796kHz           | 7.5MHz                             |
| LQH32MN151J23□ | 150µH ±5%  | 1MHz                         | 70mA          | 9.3Ω                  | 40       | 796kHz           | 7.0MHz                             |
| LQH32MN151K23□ | 150µH ±10% | 1MHz                         | 70mA          | 9.3Ω                  | 40       | 796kHz           | 7.0MHz                             |
| LQH32MN181J23□ | 180µH ±5%  | 1MHz                         | 65mA          | 10.2Ω                 | 40       | 796kHz           | 6.0MHz                             |
| LQH32MN181K23□ | 180µH ±10% | 1MHz                         | 65mA          | 10.2Ω                 | 40       | 796kHz           | 6.0MHz                             |
| LQH32MN221J23□ | 220µH ±5%  | 1MHz                         | 65mA          | 11.8Ω                 | 40       | 796kHz           | 5.5MHz                             |
| LQH32MN221K23□ | 220µH ±10% | 1MHz                         | 65mA          | 11.8Ω                 | 40       | 796kHz           | 5.5MHz                             |
| LQH32MN271J23□ | 270µH ±5%  | 1MHz                         | 65mA          | 12.5Ω                 | 40       | 796kHz           | 5.0MHz                             |
| LQH32MN271K23□ | 270µH ±10% | 1MHz                         | 65mA          | 12.5Ω                 | 40       | 796kHz           | 5.0MHz                             |
| LQH32MN331J23□ | 330µH ±5%  | 1MHz                         | 65mA          | 13.0Ω                 | 40       | 796kHz           | 5.0MHz                             |
| LQH32MN331K23□ | 330µH ±10% | 1MHz                         | 65mA          | 13.0Ω                 | 40       | 796kHz           | 5.0MHz                             |
| LQH32MN391J23□ | 390µH ±5%  | 1MHz                         | 50mA          | 22.0Ω                 | 50       | 796kHz           | 5.0MHz                             |
| LQH32MN391K23□ | 390µH ±10% | 1MHz                         | 50mA          | 22.0Ω                 | 50       | 796kHz           | 5.0MHz                             |
| LQH32MN471J23□ | 470µH ±5%  | 1kHz                         | 45mA          | 25.0Ω                 | 50       | 796kHz           | 5.0MHz                             |
| LQH32MN471K23□ | 470µH ±10% | 1kHz                         | 45mA          | 25.0Ω                 | 50       | 796kHz           | 5.0MHz                             |
| LQH32MN561J23□ | 560µH ±5%  | 1kHz                         | 40mA          | 28.0Ω                 | 50       | 796kHz           | 5.0MHz                             |
| LQH32MN561K23□ | 560µH ±10% | 1kHz                         | 40mA          | 28.0Ω                 | 50       | 796kHz           | 5.0MHz                             |

Class of Magnetic Shield: No magnetic shield

Operating Temperature Range (Self-temperature rise is not included): -40  $\sim$  85  $^{\circ}$ C

Continued on the following page.

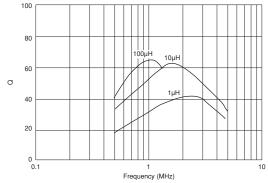
This data sheet is applied for INDUCTORS (COILS) used for General Electronics equipment for your design.

- 1. This datasheet is downloaded from the website of Murata Manufacturing co., Itd. Therefore, it's specifications are subject to change or our products in it may be discontinued without advance notice. Please check with our sales representatives or product engineers before ordering.
- 2. This datasheet has only typical specifications because there is no space for detailed specifications. Therefore, please approve our product specifications or transact the approval sheet for product specifications before ordering.

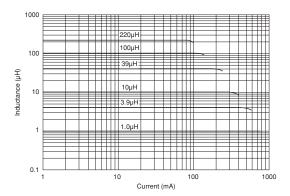
3

Ontinued from the preceding page.

# ■ Q-Frequency Characteristics (Typ.)



## ■ Inductance-Current Characteristics (Typ.)



### ■ ①Caution/Notice

### 

Do not use products beyond the rated current as this may create excessive heat.

### Notice

**Data Sheet** 

Solderability of Tin plating termination chip might be deteriorated when low temperature soldering profile where peak solder temperature is below the Tin melting point is used. Please confirm the solderability of Tin plating termination chip before use.

This data sheet is applied for INDUCTORS (COILS) used for General Electronics equipment for your design.

- 1. This datasheet is downloaded from the website of Murata Manufacturing co., Itd. Therefore, it's specifications are subject to change or our products in it may be discontinued without advance notice. Please check with our sales representatives or product engineers before ordering.
- 2. This datasheet has only typical specifications because there is no space for detailed specifications. Therefore, please approve our product specifications or transact the approval sheet for product specifications before ordering.