

# HIGH CURRENT SURFACE-MOUNT WIRE-WOUND INDUCTORS

## LQH1210 SERIES

### FEATURES:

- Ferrite Core
- High Frequency Design
- Lower DCR permits High Idc
- Available in E12 series
- Excellent Q SRF Values
- Lead free versions
- RoHS compliant
- Excellent Thermal Stability

### OPTIONS:

- Tape & Reel is Standard (Qty:2000pcs.)
- Bulk packaging Available for Smaller Quantities
- Tolerance:K=10%,M=20% is Standard, Tighter Tolerances Available

### COMMON APPLICATIONS:

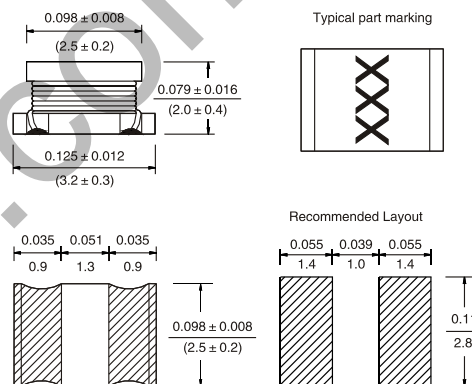
- Modems PDP. LCD TVs convertor
- Mobile Radios DC/DC convertor
- Cordless Telephones Car radios
- Global Positioning Systems
- Wireless Communications Equipment
- Networking System,xDSL Filter
- Computer Products and Peripherals

## STANDARD SPECIFICATION

| Part Number (LQH 1210 Series) | L (μH) | L Test Freq (KHz) | Q (Min) | Q Test Freq (MHz) | SRF (MHz) | DCR (Ω Max) | IDC (mA Max) |
|-------------------------------|--------|-------------------|---------|-------------------|-----------|-------------|--------------|
| LQH-1210-R10M                 | 0.1    | 1                 | 10      | 25.2              | 200       | 0.25        | 700          |
| LQH-1210-R18M                 | 0.18   | 1                 | 10      | 25.2              | 200       | 0.25        | 650          |
| LQH-1210-R27M                 | 0.27   | 1                 | 10      | 25.2              | 200       | 0.25        | 600          |
| LQH-1210-R39M                 | 0.39   | 1                 | 10      | 25.2              | 200       | 0.25        | 530          |
| LQH-1210-R56M                 | 0.56   | 1                 | 10      | 25.2              | 160       | 0.25        | 530          |
| LQH-1210-R68M                 | 0.68   | 1                 | 10      | 25.2              | 160       | 0.25        | 470          |
| LQH-1210-R82M                 | 0.82   | 1                 | 10      | 25.21             | 120       | 0.25        | 450          |
| LQH-1210-1R0M                 | 1.0    | 1                 | 10      | 1                 | 100       | 0.5         | 445          |
| LQH-1210-1R2M                 | 1.2    | 1                 | 10      | 1                 | 100       | 0.6         | 425          |
| LQH-1210-1R5M                 | 1.5    | 1                 | 10      | 1                 | 75        | 0.6         | 400          |
| LQH-1210-1R8M                 | 1.8    | 1                 | 10      | 1                 | 60        | 0.7         | 390          |
| LQH-1210-2R2M                 | 2.2    | 1                 | 10      | 1                 | 50        | 0.8         | 370          |
| LQH-1210-2R7M                 | 2.7    | 1                 | 10      | 1                 | 43        | 0.9         | 320          |
| LQH-1210-3R3M                 | 3.3    | 1                 | 10      | 1                 | 38        | 1.0         | 300          |
| LQH-1210-3R9M                 | 3.9    | 1                 | 10      | 1                 | 35        | 1.1         | 290          |
| LQH-1210-4R7K                 | 4.7    | 1                 | 20      | 1                 | 31        | 1.2         | 270          |
| LQH-1210-5R6K                 | 5.6    | 1                 | 20      | 1                 | 28        | 1.3         | 250          |
| LQH-1210-6R8K                 | 6.8    | 1                 | 20      | 1                 | 25        | 1.5         | 240          |
| LQH-1210-8R2K                 | 8.2    | 1                 | 20      | 1                 | 23        | 1.6         | 225          |
| LQH-1210-100K                 | 10     | 1                 | 25      | 1                 | 20        | 1.8         | 190          |
| LQH-1210-120K                 | 12     | 1                 | 25      | 1                 | 18        | 2.0         | 180          |
| LQH-1210-150K                 | 15     | 1                 | 25      | 1                 | 16        | 2.2         | 170          |
| LQH-1210-180K                 | 18     | 1                 | 25      | 1                 | 15        | 2.5         | 165          |
| LQH-1210-220K                 | 22     | 1                 | 25      | 1                 | 14        | 2.8         | 150          |
| LQH-1210-270K                 | 27     | 1                 | 25      | 1                 | 13        | 3.1         | 125          |
| LQH-1210-330K                 | 33     | 1                 | 25      | 1                 | 12        | 3.5         | 115          |
| LQH-1210-390K                 | 39     | 1                 | 25      | 1                 | 11        | 3.9         | 110          |
| LQH-1210-470K                 | 47     | 1                 | 25      | 1                 | 11        | 4.3         | 100          |
| LQH-1210-560K                 | 56     | 1                 | 25      | 1                 | 10        | 4.9         | 85           |
| LQH-1210-680K                 | 68     | 1                 | 25      | 1                 | 9.0       | 5.5         | 80           |
| LQH-1210-820K                 | 82     | 1                 | 25      | 1                 | 8.5       | 6.2         | 70           |
| LQH-1210-101K                 | 100    | 1                 | 30      | 0.796             | 8.0       | 7.0         | 80           |
| LQH-1210-121K                 | 120    | 1                 | 30      | 0.796             | 7.5       | 8.0         | 75           |
| LQH-1210-151K                 | 150    | 1                 | 30      | 0.796             | 7.0       | 9.3         | 70           |
| LQH-1210-181K                 | 180    | 1                 | 30      | 0.796             | 6.0       | 10.2        | 65           |
| LQH-1210-221K                 | 220    | 1                 | 30      | 0.796             | 5.5       | 11.8        | 65           |
| LQH-1210-271K                 | 270    | 1                 | 30      | 0.796             | 5.0       | 12.5        | 65           |
| LQH-1210-331K                 | 330    | 1                 | 30      | 0.796             | 5.0       | 13.0        | 65           |
| LQH-1210-391K                 | 390    | 1                 | 30      | 0.796             | 5.0       | 22.0        | 50           |
| LQH-1210-471K                 | 470    | 0.001             | 30      | 0.796             | 5.0       | 25.0        | 45           |
| LQH-1210-561K                 | 560    | 0.001             | 30      | 0.796             | 5.0       | 28.0        | 40           |

Note: 1. K= ± 10%, M= ± 20%

## PHYSICAL CHARACTERISTICS



DIMENSIONS:  $\frac{\text{INCHES}}{\text{mm}}$

## ELECTRONICAL SCHEMATIC



## TECHNICAL INFORMATION

- Inductance Testing: HP4291A, HP16193A, HP4286A or equivalent
- RDC: QuadTech 1880 Milliohm meter
- Q- HP4342A
- SRF- HP4191A
- Rated Current L value drop 10% typ. at IDC against its initial value
- Temperature rise 40°C Max Reference ambient temperature
- Solderability: 75% of the terminal electrode shall be covered
- Soldering Methods: Wave, Reflow
- Operating Temperature: -25°C to +85°C
- Storage Temperature: -55°C to +125°C

Note: All specifications subject to change without notice.

