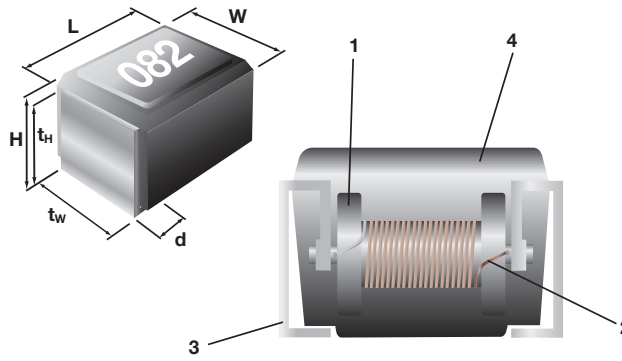


**FERRITE CORE  
WIREWOUND MOLDED  
CHIP INDUCTOR  
LFC32 KL32<sup>1)</sup>**



**STRUCTURE**

- 1 Ferrite core
- 2 Winding wire
- 3 Terminal (copper base)
- 4 Molded resin



**IDENTIFICATION**

| PRODUCT CODE | COATING COLOR | MARKING                           |
|--------------|---------------|-----------------------------------|
| LFC32 / KL32 | Black         | Silver<br>3 digit Inductance Code |

Products with Pb-free terminations meet EU-RoHS requirements

**TYPE DESIGNATION (HOW TO ORDER)**

| LFC32 (KL32) <sup>1)</sup> | T  | TE   | R56  | J   |
|----------------------------|--|--|--|---|
| PRODUCT CODE               | TERMINATION<br>SURFACE MATERIAL<br>T: Sn<br>(L: Sn/Pb) | TAPING*<br>TE, BK<br>*Please see "PACKAGING" | NOMINAL<br>INDUCTANCE<br>3 digits<br>(Unit: $\mu$ H) | INDUCTANCE<br>TOLERANCE<br>J: ( $\pm$ 5%)<br>K: ( $\pm$ 10%)<br>M: ( $\pm$ 20%) |

Contact us when you have control request for environmental hazardous material other than the substance specified by EU-RoHS

<sup>1)</sup> Type indication KL32 or LFC32 depends on measuring equipment only

**FEATURES**

- Excellent heat resistance and mechanical strength due to molded resin
- Wide inductance range due to five different ferrite materials
- Surface mount style with a footprint of „1210“
- Wide range of applications (video cameras, digital still cameras, car navigation systems, computer peripherals, mobile communications, car electronics, etc.)
- Operating temperature range:  $-40^{\circ}$  C ...  $+100^{\circ}$  C
- Suitable for reflow, wave and iron soldering
- Lab Kit available

**DIMENSIONS (mm)**

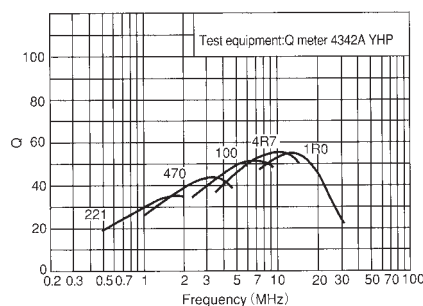
| PRODUCT CODE | L             | W             | H             | t <sub>W</sub> | t <sub>H</sub> | d <sub>(nom)</sub> |
|--------------|---------------|---------------|---------------|----------------|----------------|--------------------|
| LFC32        | $3.2 \pm 0.2$ | $2.5 \pm 0.2$ | $2.2 \pm 0.2$ | $1.7 \pm 0.1$  | $1.9 \pm 0.1$  | 0.5                |

**INDUCTANCE MEASURING EQUIPMENT**

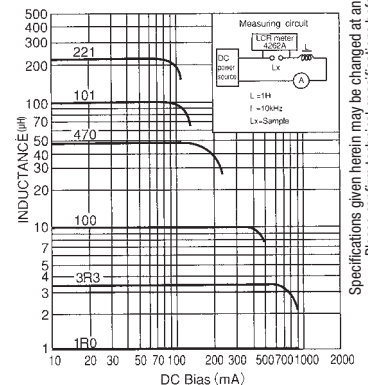
| PRODUCT CODE | INDUCTANCE RANGE   | EQUIPMENT  |
|--------------|--|--|
| LFC 32       | 0.005 $\mu$ H ... 0.10 $\mu$ H<br>0.12 $\mu$ H ... 330 $\mu$ H | Impedance analyser HP 4191 A<br>Q meter HP 4342 A            |
| KL 32        | 0.005 $\mu$ H ... 8.2 $\mu$ H<br>10 $\mu$ H ... 330 $\mu$ H    | Impedance analyser HP 4191 A<br>Impedance analyser HP 4192 A |

**CHARACTERISTICS**

**Q vs. FREQUENCY**



**DC BIAS**



Contact our sales representatives before you use our products for applications including automobiles, medical equipment and aerospace equipment. Malfunction or failure of the products in such applications may cause loss of human life or serious damage.

Specifications given herein may be changed at any time without prior notice. Please confirm technical specifications before you order or use.

## FERRITE CORE WIREWOUND MOLDED CHIP INDUCTOR LFC32 KL32<sup>1)</sup>

### RATING

| TYPE             | NOMINAL INDUCTANCE | INDUCTANCE TOLERANCE | QUALITY FACTOR (MIN.) | SELF-RESONANT FREQUENCY (MIN.) | DC RESISTANCE (MAX.) | ALLOWABLE DC CURRENT (MAX.) | MEASURING FREQUENCY |
|------------------|--------------------|----------------------|-----------------------|--------------------------------|----------------------|-----------------------------|---------------------|
| LFC32 □ TE 005 M | 0.005 μH           | M (±20%)             | 11                    | 2700 MHz                       | 0.12 Ω               |                             |                     |
| LFC32 □ TE 010 □ | 0.010 μH           |                      | 15                    | 2500 MHz                       | 0.13 Ω               |                             |                     |
| LFC32 □ TE 012 □ | 0.012 μH           |                      | 17                    | 2300 MHz                       | 0.14 Ω               |                             |                     |
| LFC32 □ TE 015 □ | 0.015 μH           | K (±10%)             | 19                    | 2100 MHz                       | 0.16 Ω               |                             |                     |
| LFC32 □ TE 018 □ | 0.018 μH           | M (±20%)             | 21                    | 1900 MHz                       | 0.18 Ω               |                             |                     |
| LFC32 □ TE 022 □ | 0.022 μH           |                      |                       | 1700 MHz                       | 0.20 Ω               |                             |                     |
| LFC32 □ TE 027 □ | 0.027 μH           |                      | 23                    | 1500 MHz                       | 0.22 Ω               |                             |                     |
| LFC32 □ TE 033 □ | 0.033 μH           |                      |                       | 1400 MHz                       | 0.24 Ω               |                             | 100 MHz             |
| LFC32 □ TE 039 □ | 0.039 μH           |                      | 25                    | 1300 MHz                       | 0.27 Ω               |                             |                     |
| LFC32 □ TE 047 □ | 0.047 μH           |                      |                       | 1200 MHz                       | 0.30 Ω               |                             |                     |
| LFC32 □ TE 056 □ | 0.056 μH           |                      | 26                    | 1100 MHz                       | 0.33 Ω               |                             |                     |
| LFC32 □ TE 068 □ | 0.068 μH           |                      |                       | 1000 MHz                       | 0.36 Ω               |                             |                     |
| LFC32 □ TE 082 □ | 0.082 μH           |                      | 27                    | 900 MHz                        | 0.40 Ω               | 450 mA                      |                     |
| LFC32 □ TE R10 □ | 0.10 μH            |                      | 28                    | 700 MHz                        | 0.44 Ω               |                             |                     |
| LFC32 □ TE R12 □ | 0.12 μH            |                      |                       | 500 MHz                        | 0.22 Ω               |                             |                     |
| LFC32 □ TE R15 □ | 0.15 μH            |                      |                       | 450 MHz                        | 0.25 Ω               |                             |                     |
| LFC32 □ TE R18 □ | 0.18 μH            |                      |                       | 400 MHz                        | 0.28 Ω               |                             |                     |
| LFC32 □ TE R22 □ | 0.22 μH            |                      |                       | 350 MHz                        | 0.32 Ω               |                             |                     |
| LFC32 □ TE R27 □ | 0.27 μH            |                      |                       | 320 MHz                        | 0.36 Ω               |                             |                     |
| LFC32 □ TE R33 □ | 0.33 μH            |                      |                       | 300 MHz                        | 0.40 Ω               |                             |                     |
| LFC32 □ TE R39 □ | 0.39 μH            |                      |                       | 250 MHz                        | 0.45 Ω               |                             | 25.2 MHz            |
| LFC32 □ TE R47 □ | 0.47 μH            |                      |                       | 220 MHz                        | 0.50 Ω               |                             |                     |
| LFC32 □ TE R56 □ | 0.56 μH            |                      |                       | 180 MHz                        | 0.55 Ω               |                             |                     |
| LFC32 □ TE R68 □ | 0.68 μH            |                      |                       | 160 MHz                        | 0.60 Ω               |                             |                     |
| LFC32 □ TE R82 □ | 0.82 μH            |                      |                       | 140 MHz                        | 0.65 Ω               |                             |                     |
| LFC32 □ TE 1R0 □ | 1.0 μH             |                      |                       | 120 MHz                        | 0.70 Ω               | 400 mA                      |                     |
| LFC32 □ TE 1R2 □ | 1.2 μH             |                      |                       | 100 MHz                        | 0.75 Ω               | 390 mA                      |                     |
| LFC32 □ TE 1R5 □ | 1.5 μH             |                      |                       | 85 MHz                         | 0.85 Ω               | 370 mA                      |                     |
| LFC32 □ TE 1R8 □ | 1.8 μH             |                      |                       | 80 MHz                         | 0.90 Ω               | 350 mA                      |                     |
| LFC32 □ TE 2R2 □ | 2.2 μH             | J (±5%)              | 30                    | 75 MHz                         | 1.0 Ω                | 320 mA                      |                     |
| LFC32 □ TE 2R7 □ | 2.7 μH             | K (±10%)             |                       | 70 MHz                         | 1.1 Ω                | 290 mA                      |                     |
| LFC32 □ TE 3R3 □ | 3.3 μH             | M (±20%)             |                       | 60 MHz                         | 1.2 Ω                | 260 mA                      | 7.96 MHz            |
| LFC32 □ TE 3R9 □ | 3.9 μH             |                      |                       | 55 MHz                         | 1.3 Ω                | 250 mA                      |                     |
| LFC32 □ TE 4R7 □ | 4.7 μH             |                      |                       | 50 MHz                         | 1.5 Ω                | 220 mA                      |                     |
| LFC32 □ TE 5R6 □ | 5.6 μH             |                      |                       | 47 MHz                         | 1.6 Ω                | 200 mA                      |                     |
| LFC32 □ TE 6R8 □ | 6.8 μH             |                      |                       | 43 MHz                         | 1.8 Ω                | 180 mA                      |                     |
| LFC32 □ TE 8R2 □ | 8.2 μH             |                      |                       | 40 MHz                         | 2.0 Ω                | 170 mA                      |                     |
| LFC32 □ TE 100 □ | 10 μH              |                      |                       | 36 MHz                         | 2.1 Ω                | 150 mA                      |                     |
| LFC32 □ TE 120 □ | 12 μH              |                      |                       | 33 MHz                         | 2.5 Ω                | 140 mA                      |                     |
| LFC32 □ TE 150 □ | 15 μH              |                      |                       | 30 MHz                         | 2.8 Ω                | 130 mA                      |                     |
| LFC32 □ TE 180 □ | 18 μH              |                      |                       | 27 MHz                         | 3.3 Ω                | 120 mA                      |                     |
| LFC32 □ TE 220 □ | 22 μH              |                      |                       | 25 MHz                         | 3.7 Ω                | 110 mA                      |                     |
| LFC32 □ TE 270 □ | 27 μH              |                      |                       | 20 MHz                         | 5.0 Ω                | 80 mA                       |                     |
| LFC32 □ TE 330 □ | 33 μH              |                      |                       | 17 MHz                         | 5.6 Ω                | 70 mA                       | 2.52 MHz            |
| LFC32 □ TE 390 □ | 39 μH              |                      |                       | 16 MHz                         | 6.4 Ω                | 65 mA                       |                     |
| LFC32 □ TE 470 □ | 47 μH              |                      |                       | 15 MHz                         | 7.0 Ω                | 60 mA                       |                     |
| LFC32 □ TE 560 □ | 56 μH              |                      |                       | 13 MHz                         | 8.0 Ω                | 55 mA                       |                     |
| LFC32 □ TE 680 □ | 68 μH              |                      |                       | 12 MHz                         | 9.0 Ω                | 50 mA                       |                     |
| LFC32 □ TE 820 □ | 82 μH              |                      |                       | 11 MHz                         | 10 Ω                 | 45 mA                       |                     |
| LFC32 □ TE 101 □ | 100 μH             |                      |                       | 10 MHz                         | 11 Ω                 | 40 mA                       |                     |
| LFC32 □ TE 121 □ | 120 μH             |                      |                       |                                |                      | 70 mA                       |                     |
| LFC32 □ TE 151 □ | 150 μH             |                      |                       | 8 MHz                          | 15 Ω                 | 65 mA                       |                     |
| LFC32 □ TE 181 □ | 180 μH             |                      | 20                    |                                | 17 Ω                 | 60 mA                       | 0.796 MHz           |
| LFC32 □ TE 221 □ | 220 μH             |                      |                       | 7 MHz                          | 21 Ω                 |                             |                     |
| LFC32 □ TE 271 □ | 270 μH             |                      |                       | 6 MHz                          | 28 Ω                 | 50 mA                       |                     |
| LFC32 □ TE 331 □ | 330 μH             |                      |                       | 5 MHz                          | 34 Ω                 |                             |                     |

□ Enter the code for termination surface material (T, L) □ Enter the code for inductance tolerance (J, K, M)

<sup>1)</sup> Type Indication KL32 or LFC32 depends on measuring equipment only

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