

Inductors

For General Applications

Radial

EL Series EL0909 Type

FEATURES

- The EL series inductors are available in ranging from 0304 to 0909 types.
- With a miniature winding construction, these inductors nonetheless achieve high Q characteristics.
- Available in tape packaging to support automated mounting machines.

APPLICATIONS

Televisions, VCRs, personal computers, and other electronic equipment.

SPECIFICATIONS

| | |
|-----------------------------|---|
| Operating temperature range | -20 to +80°C [Including self-temperature rise] |
| Storage temperature range | -40 to +80°C [Unit of products] |
| Terminal tensile strength | 14.7N min. |

PRODUCT IDENTIFICATION

| | | | | | |
|-----------|-------------|------------|------------|----------|-----------|
| <u>EL</u> | <u>0909</u> | <u>RR-</u> | <u>101</u> | <u>K</u> | <u>-3</u> |
| (1) | (2) | (3) | (4) | (5) | (6) |

(1)Series name

(2)Dimensions

| | |
|------|-------------------------------|
| 0909 | 9.4×9×13.5mm (lead pitch 5mm) |
|------|-------------------------------|

(3)Packaging style

| | |
|----|------|
| RR | Reel |
|----|------|

(4)Inductance value

| | |
|-----|--------|
| 101 | 100μH |
| 102 | 1000μH |

(5)Inductance tolerance

| | |
|---|------|
| J | ±5% |
| K | ±10% |

(6)TDK internal code

(Some products may not have this number. See the main body for details.)

PACKAGING STYLE AND QUANTITIES

| | |
|-----------------|-----------------|
| Packaging style | Quantity |
| Reel | 500 pieces/reel |

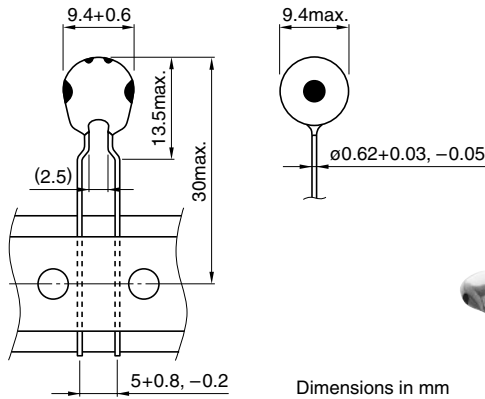
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REEL TAPING STYLE SHAPES AND DIMENSIONS



CHARACTERISTICS

| | |
|-----------------------------|---|
| Operating temperature range | -20 to +80°C [Including self-temperature rise 20°C max.] |
| Withstand voltage Erms | 250V |
| Rated current | Based on inductance change [-10% to the initial value] |
| Terminal tensile strength | 14.7N min. |
| Moisture resistance | $\Delta L/L \leq \pm 5\%$ $\Delta Q/Q \leq \pm 25\%$ |

ELECTRICAL CHARACTERISTICS

| Inductance (µH) | Inductance tolerance | Q min. | Test frequency L, Q(MHz) | Self-resonant frequency (MHz)min. | DC resistance (Ω)max. | Rated current (mA)max. | Part No. |
|-----------------|----------------------|--------|--------------------------|-----------------------------------|-----------------------|------------------------|-------------------|
| 100 | ±10, ±5% | 55 | 0.796 | 4.3 | 0.85 | 343 | EL0909RR-101X*1-2 |
| 120 | ±10, ±5% | 55 | 0.796 | 4.1 | 0.95 | 324 | EL0909RR-121X-2 |
| 150 | ±10, ±5% | 55 | 0.796 | 3.7 | 1.05 | 309 | EL0909RR-151X-2 |
| 180 | ±10, ±5% | 55 | 0.796 | 3.3 | 1.15 | 295 | EL0909RR-181X-2 |
| 220 | ±10, ±5% | 50 | 0.796 | 2.3 | 1.3 | 277 | EL0909RR-221X-2 |
| 270 | ±10, ±5% | 50 | 0.796 | 2 | 1.5 | 258 | EL0909RR-271X-2 |
| 330 | ±10, ±5% | 50 | 0.796 | 1.95 | 1.7 | 243 | EL0909RR-331X-2 |
| 390 | ±10, ±5% | 50 | 0.796 | 1.85 | 1.85 | 232 | EL0909RR-391X-2 |
| 470 | ±10, ±5% | 50 | 0.796 | 1.57 | 2.3 | 209 | EL0909RR-471X-2 |
| 560 | ±10, ±5% | 45 | 0.796 | 1.5 | 2.55 | 198 | EL0909RR-561X-2 |
| 680 | ±10, ±5% | 40 | 0.796 | 1.4 | 2.85 | 187 | EL0909RR-681X-2 |
| 820 | ±10, ±5% | 35 | 0.796 | 1.32 | 3.1 | 180 | EL0909RR-821X-2 |
| 1000 | ±10, ±5% | 60 | 0.252 | 1.25 | 4.1 | 156 | EL0909RR-102X-2 |
| 1200 | ±10, ±5% | 60 | 0.252 | 1.2 | 4.7 | 146 | EL0909RR-122X-2 |
| 1500 | ±10, ±5% | 60 | 0.252 | 1 | 5.8 | 131 | EL0909RR-152X-2 |
| 1800 | ±10, ±5% | 60 | 0.252 | 0.95 | 7.4 | 116 | EL0909RR-182X-2 |
| 2200 | ±10, ±5% | 65 | 0.252 | 0.9 | 8.4 | 109 | EL0909RR-222X-2 |
| 2700 | ±10, ±5% | 65 | 0.252 | 0.84 | 11.2 | 94 | EL0909RR-272X-2 |
| 3300 | ±10, ±5% | 65 | 0.252 | 0.75 | 14.7 | 82 | EL0909RR-332X-2 |
| 3900 | ±10, ±5% | 65 | 0.252 | 0.67 | 19.5 | 72 | EL0909RR-392X-2 |
| 4700 | ±10, ±5% | 65 | 0.252 | 0.62 | 21.5 | 68 | EL0909RR-472X-2 |
| 5600 | ±10, ±5% | 60 | 0.252 | 0.57 | 24.5 | 64 | EL0909RR-562X-2 |
| 6800 | ±10, ±5% | 60 | 0.252 | 0.47 | 32.5 | 55 | EL0909RR-682X-2 |
| 8200 | ±10, ±5% | 55 | 0.252 | 0.43 | 38 | 51 | EL0909RR-822X-2 |
| 10000 | ±10, ±5% | 50 | 0.001*2/0.0796*3 | 0.38 | 43 | 48 | EL0909RR-103X-2 |
| 12000 | ±10, ±5% | 50 | 0.001/0.0796 | 0.37 | 62 | 40 | EL0909RR-123X-2 |
| 15000 | ±10, ±5% | 50 | 0.001/0.0796 | 0.33 | 74 | 37 | EL0909RR-153X-2 |
| 18000 | ±10, ±5% | 50 | 0.001/0.0796 | 0.29 | 103 | 31 | EL0909RR-183X-2 |
| 22000 | ±10, ±5% | 50 | 0.001/0.0796 | 0.26 | 118 | 29 | EL0909RR-223X-2 |
| 27000 | ±10, ±5% | 50 | 0.001/0.0796 | 0.25 | 131 | 28 | EL0909RR-273X-2 |
| 33000 | ±10, ±5% | 50 | 0.001/0.0796 | 0.25 | 185 | 23 | EL0909RR-333X-2 |
| 39000 | ±10, ±5% | 40 | 0.001/0.0796 | 0.23 | 205 | 22 | EL0909RR-393X-2 |
| 47000 | ±10, ±5% | 35 | 0.001/0.0796 | 0.21 | 260 | 20 | EL0909RR-473X-2 |
| 56000 | ±10, ±5% | 35 | 0.001/0.0796 | 0.2 | 295 | 18 | EL0909RR-563X-2 |

*1 X: Please specify inductance tolerance, K(±10%) or J(±5%)

*2 for L

*3 for Q

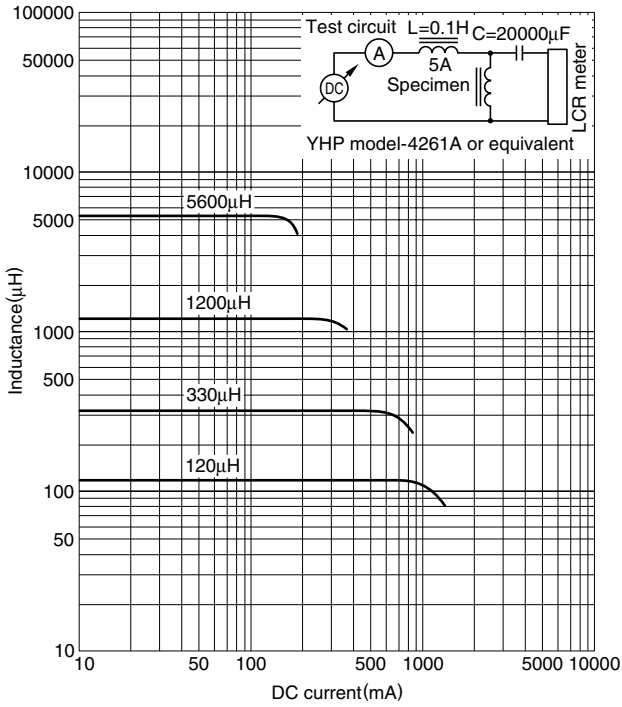
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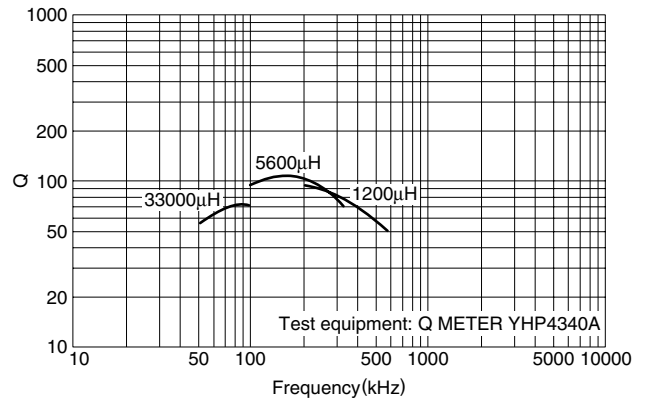
EL Series EL0909 Type

TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



Q vs. FREQUENCY CHARACTERISTICS



• All specifications are subject to change without notice.