Inductors

For Power Line Radial

FEATURES

- The TSL series feature low DC resistance and high current handling capacities, making them ideal for power supply line applications.
- These parts are manufactured to a high degree of dimensional accuracy using non-flammable material (UL94V-0).
- Available in tape packaging to support automated mounting machines.

APPLICATIONS

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

SPECIFICATIONS

| Operating temperature range | –20 to +85°C [Including self-temperature rise] | | |
|-----------------------------|---|--|--|
| Storage temperature range | -40 to +85°C[Unit of products] | | |
| Terminal tensile strength | 9.8N min. | | |

PRODUCT IDENTIFICATION

| TSL | 0709 | RA- | 1R0 | М | 5R0 |
|-----|------|-----|-----|-----|-----|
| (1) | (2) | (3) | (4) | (5) | (6) |

(1)Series name

(2)Dimensions

| 0709 | ø7.7×9.5mm (lead pitch 5mm) |
|------|-------------------------------|
| 0809 | ø8.8×9.5mm (lead pitch 5mm) |
| 1112 | ø11.2×12.2mm (lead pitch 5mm) |
| 1315 | ø14×17mm (lead pitch 7.5mm) |

(3)Packaging style

| RA | Taping(Ammo-pack) |
|----|-------------------|
| S | Bulk |

(4)Inductance value

| , | | |
|-----|------|--|
| 1R0 | 1μH | |
| 100 | 10μH | |

(5)Inductance tolerance

| J | ±5% | |
|---|------|--|
| K | ±10% | |
| Μ | ±20% | |

(6)Rated current

| 5R0 | 5A |
|-----|-------|
| R66 | 0.66A |

PACKAGING STYLE AND QUANTITIES

| Packaging style | Туре | Quantity |
|-----------------|-----------|--------------------|
| Taping | TSL0709RA | 1000 pieces/box |
| (Ammo-pack) | TSL0809RA | 500 pieces/box |
| | TSL1112RA | 500 pieces/box |
| | TSL1315RA | 200 pieces/box |
| Bulk | TSL0709S | 500 pieces/10tray* |
| | TSL0809S | 500 pieces/10tray |
| | TSL1112S | 400 pieces/8tray |
| | TSL1315S | 50 pieces/pack |
| | | *50 : // |

*50 pieces/tray

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SHAPES AND DIMENSIONS





Dimensions in mm

ELECTRICAL CHARACTERISTICS

| | | | Test Self-resonant DC | | DC | Rated current (A)*max. | | |
|------------|------------|--------|-----------------------|-----------|------------|------------------------|------------------|-----------------|
| Inductance | Inductance | Q min. | frequency | frequency | resistance | Based on inductance | Based on | Part No. |
| (μΗ) | loierance | | L/Q (Hz) | (MHz)min. | (Ω)max. | change | temperature rise | |
| 3.3 | ±20% | 10 | 1k/7.96M | 36 | 0.01 | 8.8 | 5.9 | TSL1112-3R3M5R9 |
| 4.7 | ±20% | 10 | 1k/7.96M | 28 | 0.015 | 7.2 | 4.8 | TSL1112-4R7M4R8 |
| 6.8 | ±20% | 10 | 1k/7.96M | 18 | 0.016 | 6.1 | 4.6 | TSL1112-6R8M4R6 |
| 10 | ±20% | 20 | 1k/2.52M | 16 | 0.025 | 5 | 3.7 | TSL1112-100M3R7 |
| 15 | ±20% | 20 | 1k/2.52M | 12 | 0.029 | 4.2 | 3.4 | TSL1112-150M3R4 |
| 22 | ±10% | 20 | 1k/2.52M | 9.5 | 0.04 | 3.4 | 2.9 | TSL1112-220K2R9 |
| 33 | ±10% | 30 | 1k/2.52M | 7 | 0.062 | 2.8 | 2.3 | TSL1112-330K2R3 |
| 47 | ±10% | 30 | 1k/2.52M | 5.8 | 0.075 | 2.3 | 2.1 | TSL1112-470K2R1 |
| 68 | ±10% | 20 | 1k/2.52M | 4.7 | 0.13 | 1.9 | 1.6 | TSL1112-680K1R6 |
| 100 | ±10% | 20 | 1k/796k | 3.8 | 0.16 | 1.6 | 1.4 | TSL1112-101K1R4 |
| 150 | ±10% | 20 | 1k/796k | 3.1 | 0.26 | 1.3 | 1.1 | TSL1112-151K1R1 |
| 220 | ±10% | 20 | 1k/796k | 2.5 | 0.33 | 1.1 | 1 | TSL1112-221K1R0 |
| 330 | ±10% | 20 | 1k/796k | 2 | 0.52 | 0.88 | 0.82 | TSL1112-331KR82 |
| 470 | ±10% | 10 | 1k/796k | 1.6 | 0.66 | 0.75 | 0.72 | TSL1112-471KR72 |
| 680 | ±10% | 10 | 1k/796k | 1.3 | 1.1 | 0.61 | 0.56 | TSL1112-681KR56 |
| 1000 | ±5% | 20 | 1k/252k | 1.1 | 1.4 | 0.51 | 0.5 | TSL1112-102JR50 |
| 1500 | ±5% | 30 | 1k/252k | 0.82 | 2.4 | 0.43 | 0.38 | TSL1112-152JR38 |
| 2200 | ±5% | 20 | 1k/252k | 0.76 | 3.2 | 0.35 | 0.33 | TSL1112-222JR33 |
| 3300 | ±5% | 30 | 1k/252k | 0.64 | 4.9 | 0.28 | 0.26 | TSL1112-332JR26 |
| 4700 | ±5% | 30 | 1k/252k | 0.54 | 7.6 | 0.24 | 0.21 | TSL1112-472JR21 |
| 6800 | ±5% | 30 | 1k/252k | 0.45 | 9.8 | 0.2 | 0.18 | TSL1112-682JR18 |
| 10000 | ±5% | 30 | 1k/79.6k | 0.38 | 18 | 0.17 | 0.14 | TSL1112-103JR14 |
| 15000 | ±5% | 50 | 1k/79.6k | 0.29 | 24 | 0.13 | 0.12 | TSL1112-153JR12 |

* Rated current: Value obtained when current flows and the temperature has risen to 25°C or when DC current flows and the initial value of inductance has fallen by 10%, whichever is smaller.

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TSL Series TSL1112 Type

TYPICAL ELECTRICAL CHARACTERISTICS INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



532_TSL1112 980917

