

Cautions and Warnings

Please be noted that this spec is only for reference if you have projects designed with the product number listed in. If you are looking for new project design-in, please find BWVT Series specification/datasheet on Chilisin website. Or you may find our sales contact for more information on old part number at your convenience. Appreciated your attention and understanding.

Note: Please be sure to request approval specifications that provide further details of the products. Kindly note that the content of these specifications are subject to change or may be discontinued without prior notice. This product may not be designed/used in medical or high risk applications without Chilisin approval. Please contact our sales department before ordering.

LVT Series



LVT series, an automatic assembly constructed power inductor, is shielded with magnetic resin and suitable for portable DC-DC converter applications.

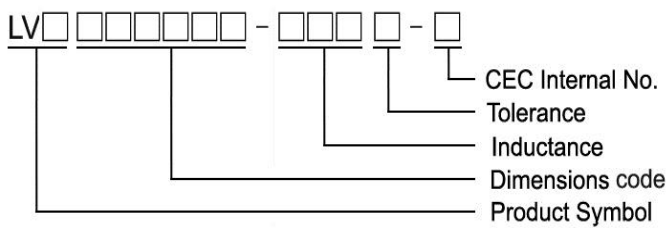
Features

- RoHS, Halogen Free and REACH Compliance
- Shielded with magnetic resin
- Various package size and wide inductance range
- Optimize electrical characteristics by using different ferrite core figures

Applications

- Smartphones, tablets and wearable devices
- DSC, camcorders
- AP Routers
- STBs
- LCD TVs, monitors and panels
- Game consoles
- DC/DC converters

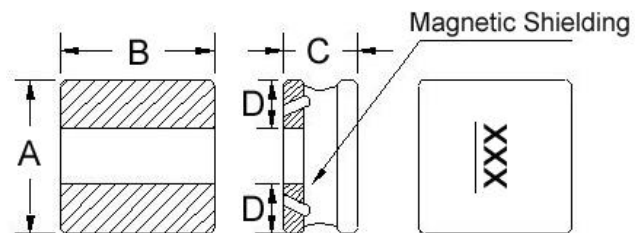
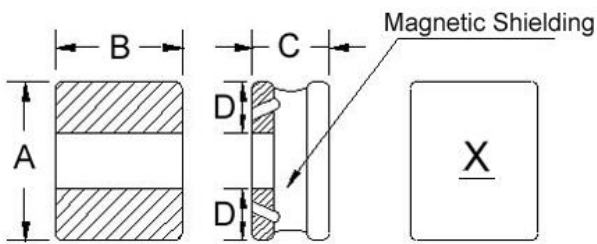
Product Identification



Shape and Dimensions

Figure 1

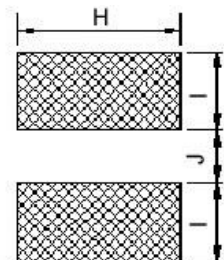
Figure 2



Recommended Pattern

Dimensions in mm

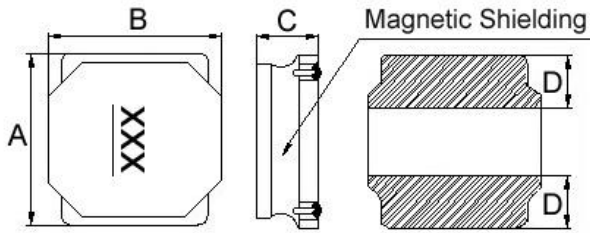
| TYPE | FIG | A | B | C | D | H | I | J |
|-----------|-----|----------|----------|----------|-----|-----|------|-----|
| LVT201B10 | 1 | 2.0±0.25 | 1.6±0.25 | 1.00Max | 0.6 | 1.8 | 0.80 | 0.8 |
| LVT252A10 | 1 | 2.5±0.25 | 2.0±0.25 | 1.02 Max | 0.8 | 2.2 | 0.85 | 0.8 |
| LVT252A12 | 1 | 2.5±0.25 | 2.0±0.25 | 1.2±0.05 | 0.8 | 2.2 | 0.85 | 0.8 |
| LVT303010 | 2 | 3.0±0.20 | 3.0±0.20 | 1.02 Max | 1.0 | 3.2 | 1.1 | 1.0 |
| LVT303012 | 2 | 3.0±0.20 | 3.0±0.20 | 1.20 Max | 1.0 | 3.2 | 1.1 | 1.0 |
| LVT404012 | 2 | 4.0±0.20 | 4.0±0.20 | 1.2±0.1 | 1.5 | 4.2 | 1.5 | 1.2 |



Sealed Power Inductors – LVT Series

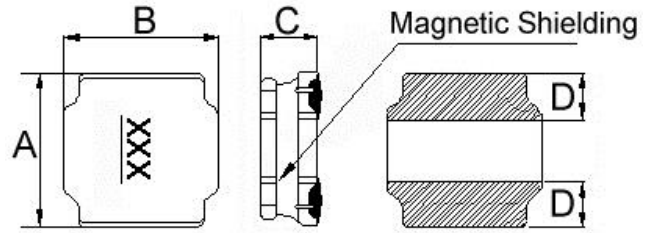
Shape and Dimensions

Figure 3



Recommended Pattern

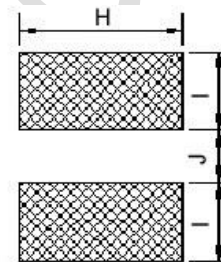
Figure 4



Dimensions in mm

| TYPE | FIG | A | B | C | D | H | I | J |
|-----------|-----|----------|----------|--------------------------------------|---------|-----|-----|-----|
| LVT404015 | 3 | 4.0±0.25 | 4.0±0.25 | 1.5±0.2 | 1.3 | 3.7 | 1.5 | 1.2 |
| LVT404026 | 3 | 4.0±0.20 | 4.0±0.20 | 2.6±0.2 | 1.4 | 3.7 | 1.6 | 1.2 |
| LVT505020 | 4 | 5.0±0.2 | 5.0±0.2 | 2.0±0.2 | 1.8±0.3 | 4.2 | 1.6 | 2.0 |
| LVT606020 | 4 | 6.0±0.2 | 6.0±0.2 | 2.0±0.2 | 1.7±0.3 | 5.7 | 1.7 | 2.8 |
| LVT808040 | 4 | 8.0±0.2 | 8.0±0.2 | 4.0 ^{+0.2} _{-0.30} | 2.3±0.3 | 7.5 | 2.5 | 3.4 |

Recommended Pattern



NOT FOR NEW DESIGN

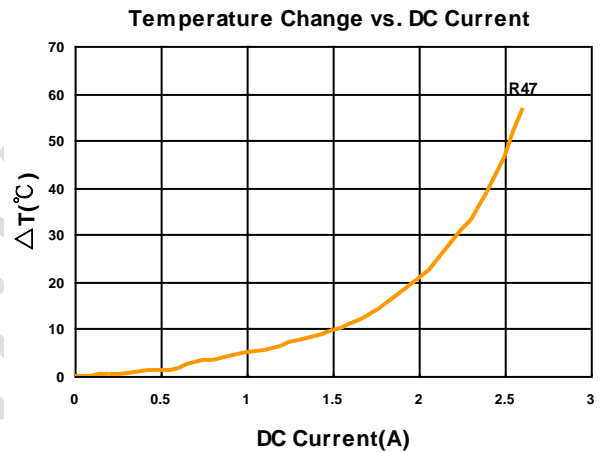
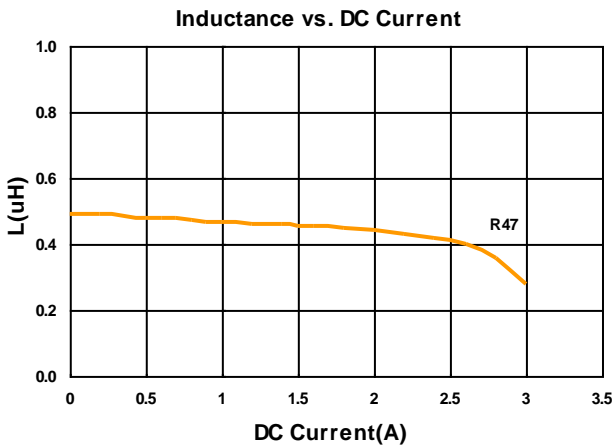
Electrical Characteristics

| Part Number | Inductance (uH) | Tolerance (±%) | Test Frequency (MHz) | RDC (mΩ) ±30% | Isat (A) Typ. (Max) | Irms (A) Typ. (Max) | Marking |
|------------------|-----------------|----------------|----------------------|---------------|---------------------|---------------------|---------|
| LVT201B10-R47□-N | 0.47 | 20, 30 | 1 | 72 | 2.4(2.16) | 2.4(2.16) | A |

Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T =±30%

- Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 30% from its value without current
- Irms for a 40°C temperature rise from 25°C ambient with current
- Measure Equipment :
- L : Agilent HP4287A+Agilent HP16197A, 1MHz 200mV
- RDC : DIGITAL MILLINHM METER CHROMA 16502, or equivalent
- Isat & Irms : Agilent HP4284A

Test Instruments : HP4284A Material/Impedance Analyzer



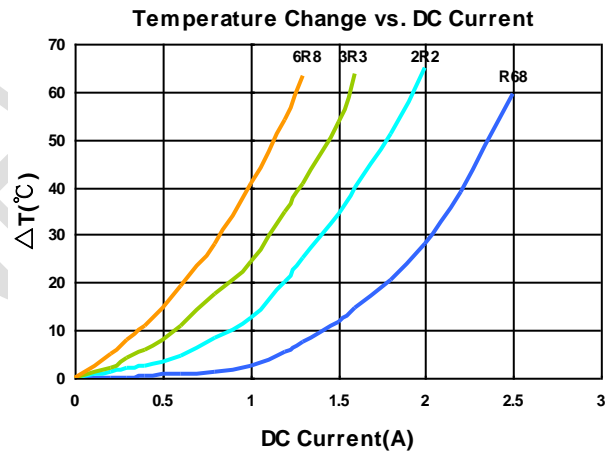
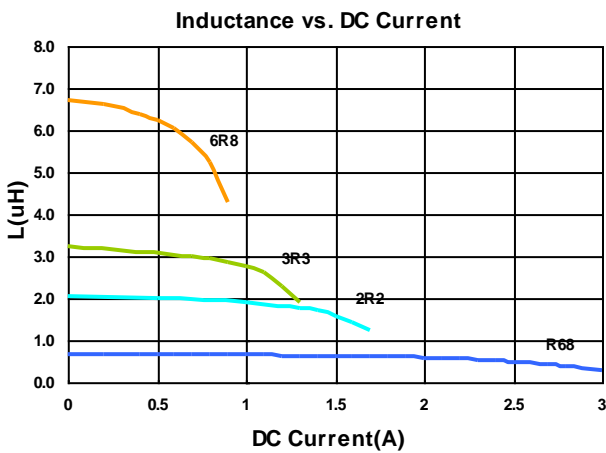
Electrical Characteristics

| Part Number | Inductance (uH) | Tolerance (±%) | Test Frequency (MHz) | RDC (Ω) ±30% | Isat (A) Typ. (Max) | Irms (A) Typ. (Max) | Marking |
|------------------|-----------------|----------------|----------------------|--------------|---------------------|---------------------|---------|
| LVT252A10-R68□-N | 0.68 | 20, 30 | 1 | 0.050 | 2.40(2.160) | 2.20(1.980) | K |
| LVT252A10-2R2□-N | 2.2 | 20, 30 | 1 | 0.135 | 1.42(1.270) | 1.55(1.390) | D |
| LVT252A10-3R3□-N | 3.3 | 20, 30 | 1 | 0.220 | 1.12(1.000) | 1.20(1.080) | E |
| LVT252A10-6R8□-N | 6.8 | 20, 30 | 1 | 0.435 | 0.78(0.700) | 0.84(0.750) | G |

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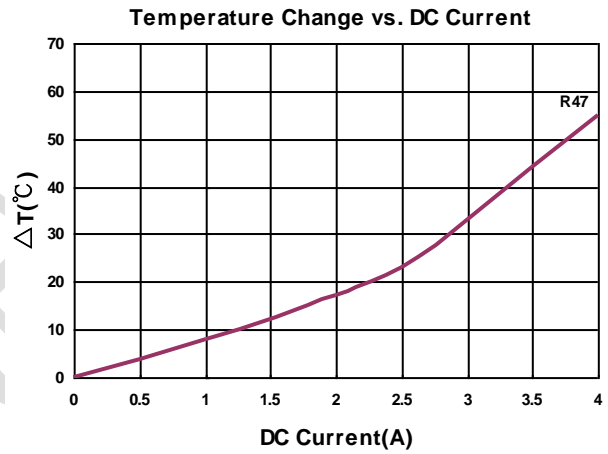
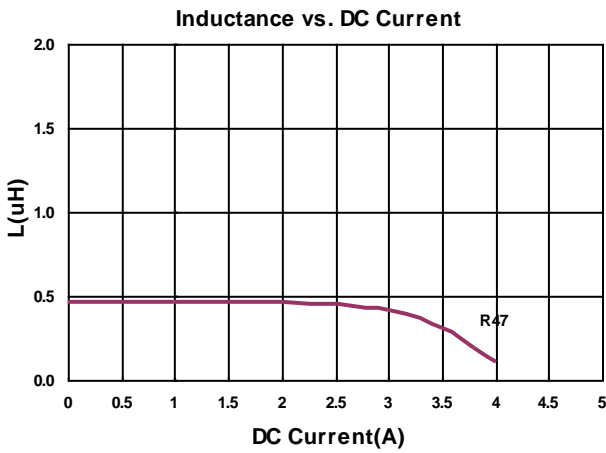
Electrical Characteristics

| Part Number | Inductance (uH) | Tolerance (±%) | Test Frequency (MHz) | RDC (Ω) ±30% | Isat (A) Typ. (Max) | Irms (A) Typ. (Max) | Marking |
|------------------|-----------------|----------------|----------------------|--------------|---------------------|---------------------|---------|
| LVT252A12-R47□-N | 0.47 | 20, 30 | 1 | 0.027 | 3.70(3.330) | 3.10(2.790) | A |

Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T =±30%

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Test Instruments : HP4284A Material/Impedance Analyzer



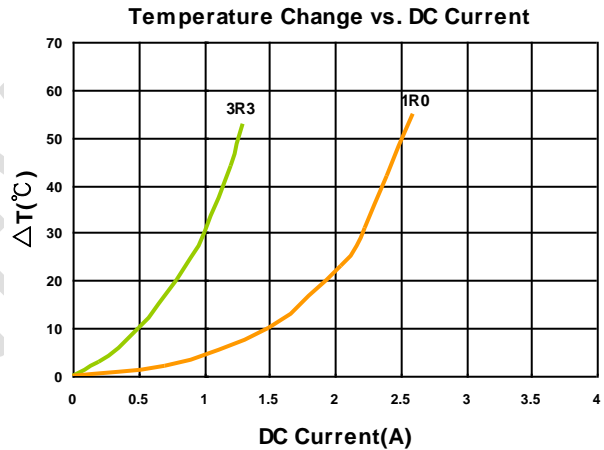
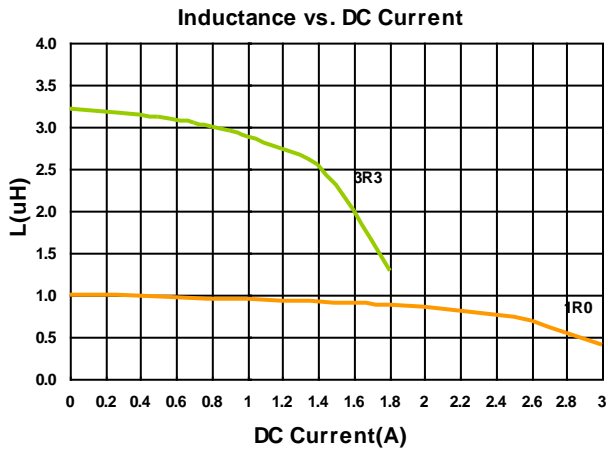
Electrical Characteristics

| Part Number | Inductance (uH) | Tolerance (±%) | Test Frequency (MHz) | RDC (Ω) ±30% | Isat (A) Typ. (Max) | Irms (A) Typ. (Max) | Marking |
|------------------|-----------------|----------------|----------------------|--------------|---------------------|---------------------|---------|
| LVT303010-1R0□-N | 1.0 | 20, 30 | 1 | 0.063 | 2.4(2.16) | 2.3(2.07) | 1R0 |
| LVT303010-3R3□-N | 3.3 | 20, 30 | 1 | 0.165 | 1.2(1.08) | 1.1(0.99) | 3R3 |

Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T =±30%

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- RDC : DIGITAL MILLINHM METER CHROMA 16502, or equivalent
- Isat & I rms : Agilent HP4284A

Test Instruments : HP4284A Material/Impedance Analyzer



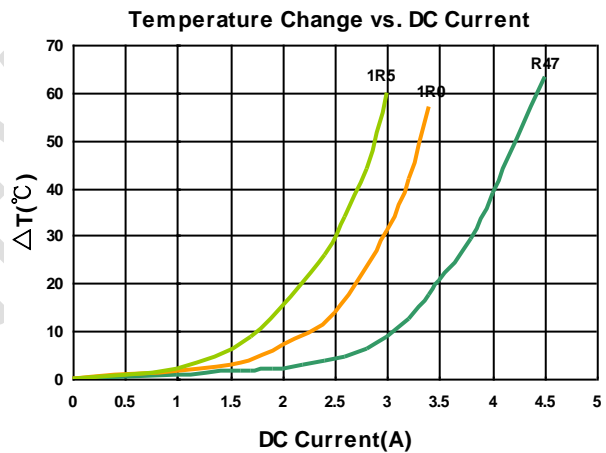
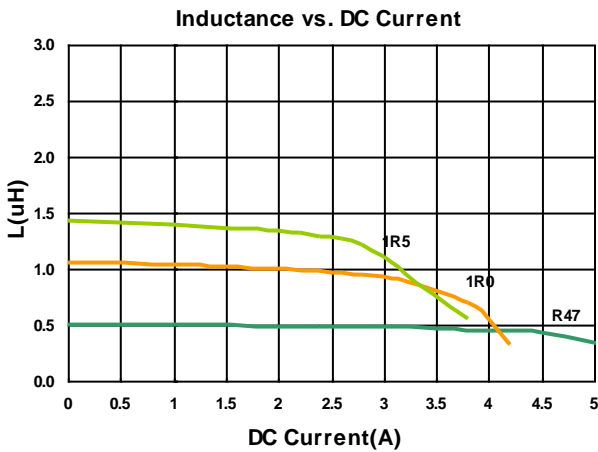
Electrical Characteristics

| Part Number | Inductance (uH) | Tolerance (±%) | Test Frequency (MHz) | RDC (Ω) ±30% | Isat (A) Typ. (Max) | Irms (A) Typ. (Max) | Marking |
|------------------|-----------------|----------------|----------------------|--------------|---------------------|---------------------|---------|
| LVT303012-R47□-N | 0.47 | 20, 30 | 1 | 0.032 | 4.3(3.87) | 4.0(3.60) | R47 |
| LVT303012-1R0□-N | 1.0 | 20, 30 | 1 | 0.060 | 3.1(2.79) | 3.0(2.70) | 1R0 |
| LVT303012-1R5□-N | 1.5 | 20, 30 | 1 | 0.072 | 2.7(2.43) | 2.6(2.34) | 1R5 |

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Test Instruments : HP4284A Material/Impedance Analyzer



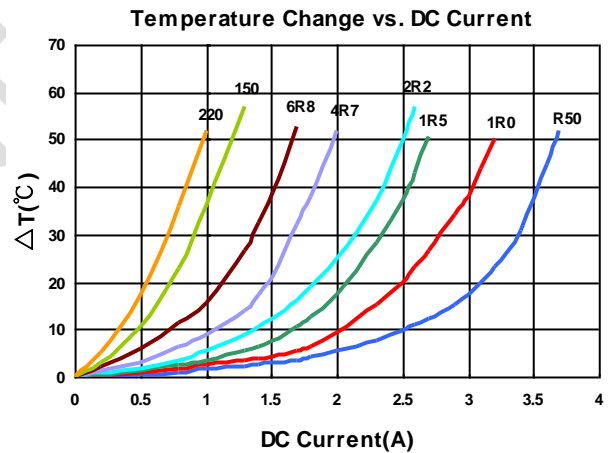
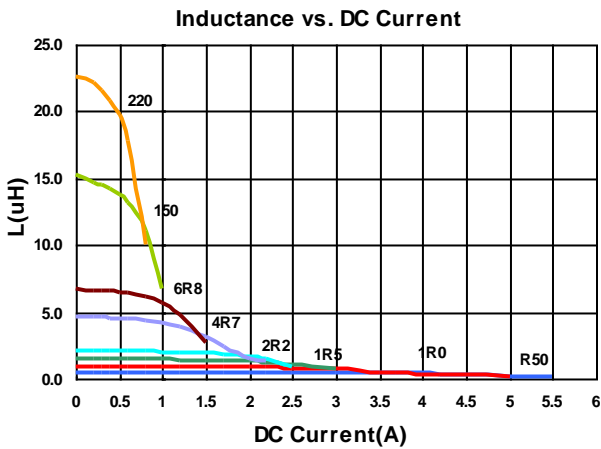
Electrical Characteristics

| Part Number | Inductance (uH) | Tolerance (±%) | Test Frequency (MHz) | RDC (Ω) ±30% | Isat (A) Typ. (Max) | Irms (A) Typ. (Max) | Marking |
|------------------|-----------------|----------------|----------------------|--------------|---------------------|---------------------|---------|
| LVT404012-R50□-N | 0.5 | 20, 30 | 1 | 0.030 | 3.90(3.51) | 3.50(3.15) | R50 |
| LVT404012-1R0□-N | 1.0 | 20, 30 | 1 | 0.040 | 2.90(2.60) | 3.00(2.70) | 1R0 |
| LVT404012-1R5□-N | 1.5 | 20, 30 | 1 | 0.051 | 2.30(2.07) | 2.50(2.25) | 1R5 |
| LVT404012-2R2□-N | 2.2 | 20, 30 | 1 | 0.060 | 1.90(1.71) | 2.30(2.07) | 2R2 |
| LVT404012-4R7□-N | 4.7 | 20, 30 | 1 | 0.094 | 1.32(1.18) | 1.80(1.62) | 4R7 |
| LVT404012-6R8□-N | 6.8 | 20, 30 | 1 | 0.135 | 1.08(0.97) | 1.50(1.35) | 6R8 |
| LVT404012-150□-N | 15 | 20, 30 | 1 | 0.260 | 0.78(0.70) | 1.00(0.90) | 150 |
| LVT404012-220□-N | 22 | 20, 30 | 1 | 0.390 | 0.62(0.55) | 0.80(0.72) | 220 |

Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T =±30%

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Isat & I rms : Agilent HP4284A

Test Instruments : HP4284A Material/Impedance Analyzer



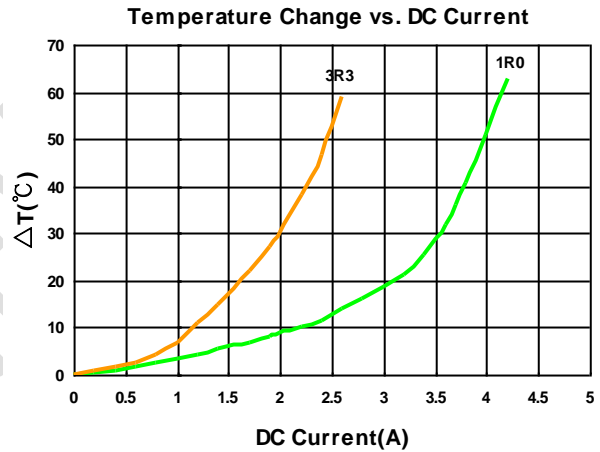
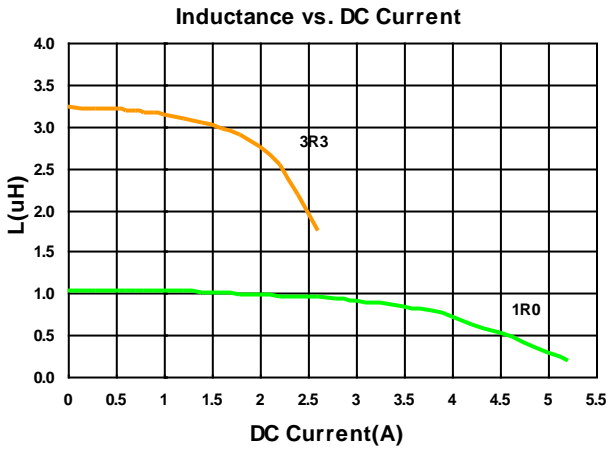
Electrical Characteristics

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|------------------|-----------------|----------------|----------------------|--------------|---------------------|---------------------|---------|
| LVT404015-1R0□-N | 1.0 | 20, 30 | 1 | 0.034 | 3.60(3.24) | 3.70(3.33) | 1R0 |
| LVT404015-3R3□-N | 3.3 | 20, 30 | 1 | 0.080 | 2.00(1.80) | 2.20(1.98) | 3R3 |

Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T =±30%

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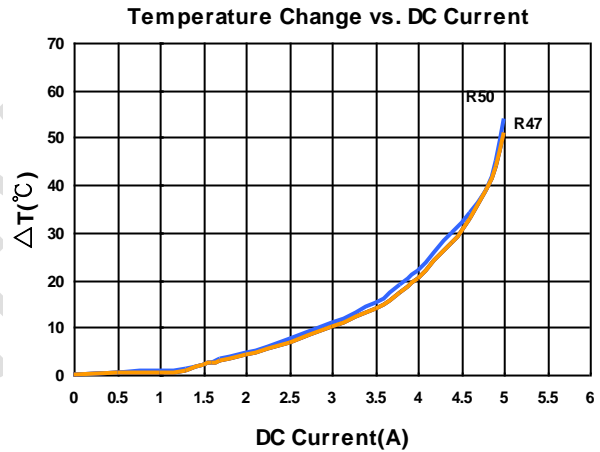
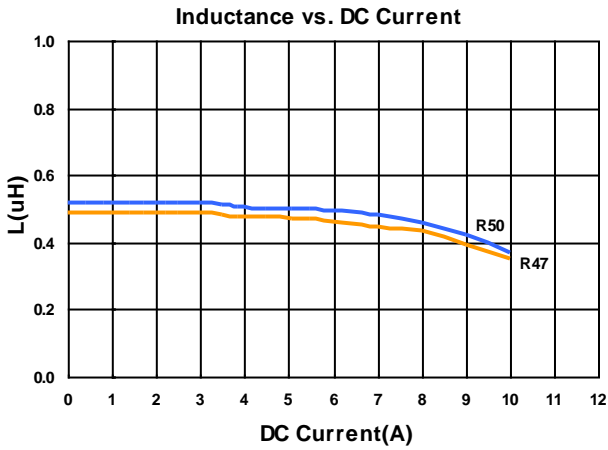
Electrical Characteristics

| Part Number | Inductance (uH) | Tolerance (±%) | Test Frequency (kHz) | RDC (Ω) ±30% | Isat (A) Typ. (Max) | Irms (A) Typ. (Max) | Marking |
|------------------|-----------------|----------------|----------------------|--------------|---------------------|---------------------|---------|
| LVT404026-R47□-N | 0.47 | 20, 30 | 100 | 0.024 | 7.20(6.48) | 4.80(4.32) | R47 |
| LVT404026-R50□-N | 0.50 | 20, 30 | 100 | 0.024 | 7.20(6.48) | 4.80(4.32) | R50 |

Note: When ordering, please specify tolerance code. Tolerance: M=±20% , T =±30%

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Test Instruments : HP4284A Material/Impedance Analyzer



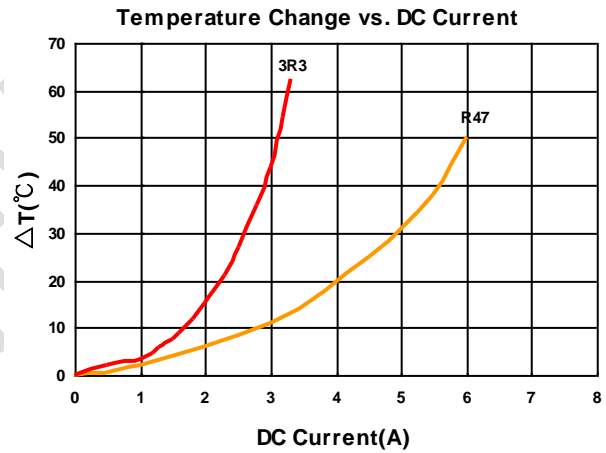
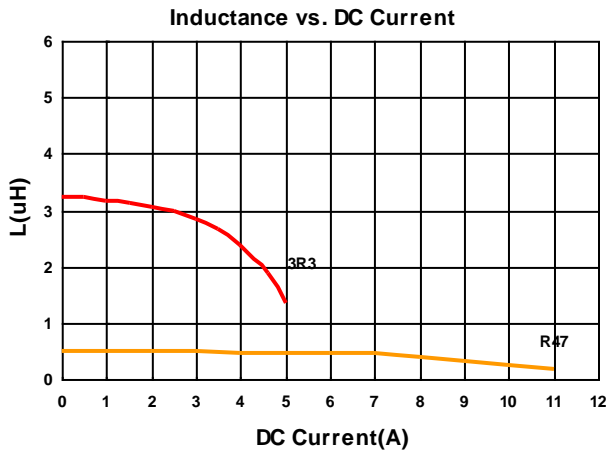
Electrical Characteristics

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|------------------|-----------------|----------------|----------------------|--------------|---------------------|---------------------|---------|
| LVT505020-R47□-N | 0.47 | 20, 30 | 100 | 0.0135 | 8.0(7.2) | 5.5(5.0) | R47 |
| LVT505020-3R3□-N | 3.3 | 20, 30 | 100 | 0.050 | 3.4(3.06) | 2.7(2.43) | 3R3 |

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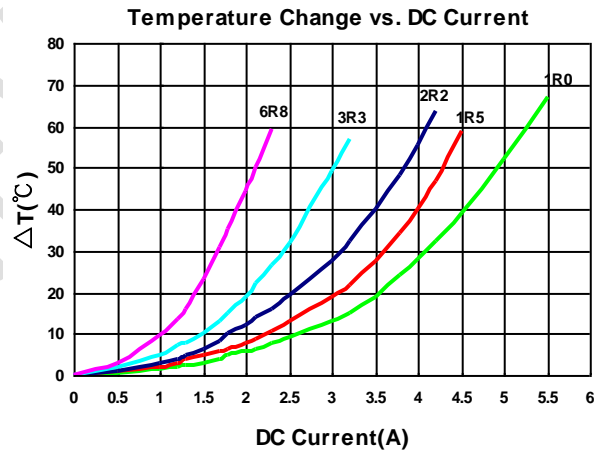
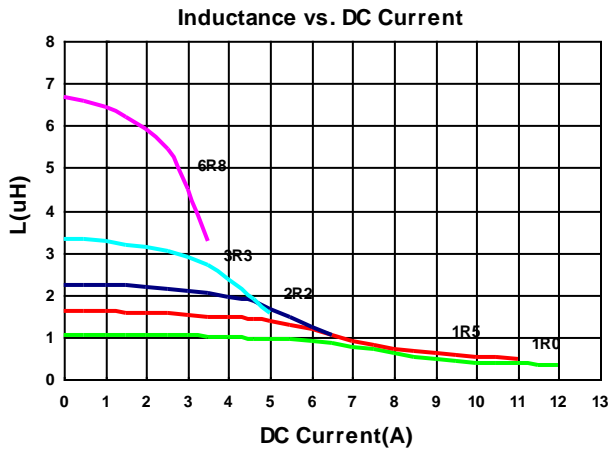
Electrical Characteristics

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|------------------|-----------------|----------------|----------------------|--------------|---------------------|---------------------|---------|
| LVT606020-1R0□-N | 1.0 | 20, 30 | 100 | 0.019 | 6.4(5.76) | 4.2(3.78) | 1R0 |
| LVT606020-1R5□-N | 1.5 | 20, 30 | 100 | 0.026 | 5.4(4.86) | 3.7(3.33) | 1R5 |
| LVT606020-2R2□-N | 2.2 | 20, 30 | 100 | 0.034 | 4.5(4.05) | 3.3(2.97) | 2R2 |
| LVT606020-3R3□-N | 3.3 | 20, 30 | 100 | 0.045 | 3.6(3.24) | 2.8(2.52) | 3R3 |
| LVT606020-6R8□-N | 6.8 | 20, 30 | 100 | 0.085 | 2.6(2.34) | 1.9(1.71) | 6R8 |

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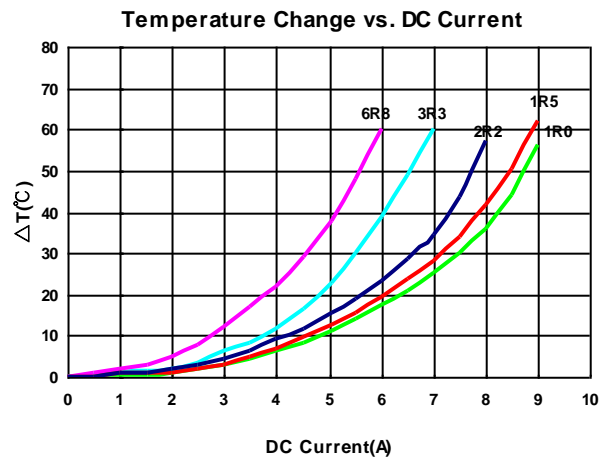
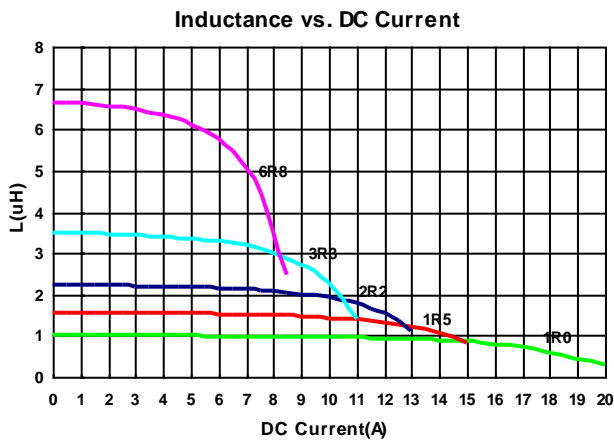
Electrical Characteristics

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|------------------|-----------------|----------------|----------------------|--------------|---------------------|---------------------|---------|
| LVT808040-1R0□-N | 1.0 | 20, 30 | 100 | 0.0075 | 13.5(12.15) | 8.1(7.29) | 1R0 |
| LVT808040-1R5□-N | 1.5 | 20, 30 | 100 | 0.0097 | 10.5(9.45) | 7.7(6.93) | 1R5 |
| LVT808040-2R2□-N | 2.2 | 20, 30 | 100 | 0.012 | 9.7(8.73) | 7.2(6.48) | 2R2 |
| LVT808040-3R3□-N | 3.3 | 20, 30 | 100 | 0.047 | 8.0(7.20) | 5.9(5.31) | 3R3 |
| LVT808040-6R8□-N | 6.8 | 20, 30 | 100 | 0.029 | 5.8(5.22) | 4.9(4.41) | 6R8 |

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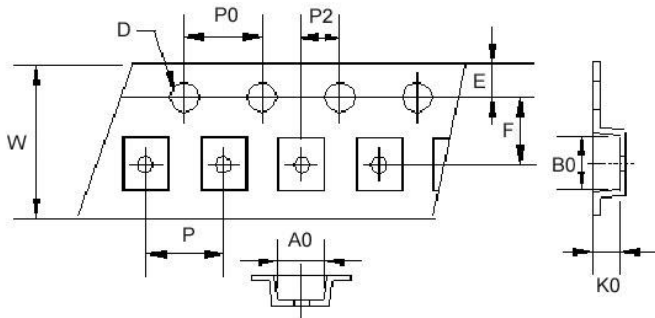


Sealed Power Inductors – LVT Series

Packaging Specifications

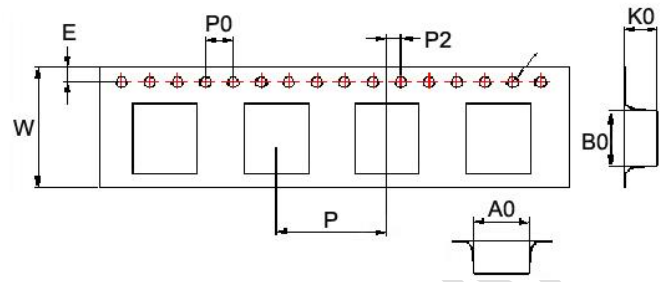
Tape Dimensions

Figure 1



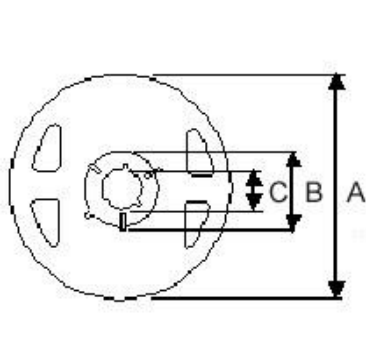
Tape Dimensions

Figure 2



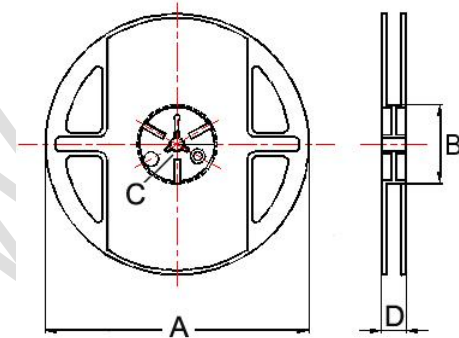
Reel Dimensions

Figure 1



Reel Dimensions

Figure 2



Dimensions in mm

| TYPE | Fig | Tape Dimensions | | | | | | | | | | Reel Dimensions | | | | | Quantity PCS / Reel |
|-----------|-----|-----------------|------|------|------|------|-----|-----|----|----|----|-----------------|-----|----|------|-----|------------------------|
| | | A0 | B0 | K0 | D | E | F | W | P | P0 | P2 | A | B | C | D | E | |
| LVT201B10 | 1 | 1.90 | 2.20 | 1.15 | 1.55 | 1.75 | 3.5 | 8.1 | 4 | 4 | 2 | 180 | 60 | 13 | 14.4 | 8.4 | 2000 |
| LVT252A10 | 1 | 2.40 | 2.70 | 1.15 | 1.55 | 1.75 | 3.5 | 8.1 | 4 | 4 | 2 | 180 | 60 | 13 | 14.4 | 8.4 | 2000 |
| LVT252A12 | 1 | 2.40 | 2.70 | 1.35 | 1.55 | 1.75 | 3.5 | 8.1 | 4 | 4 | 2 | 180 | 60 | 13 | 14.4 | 8.4 | 2000 |
| LVT303010 | 1 | 3.20 | 3.20 | 1.40 | 1.55 | 1.75 | 3.5 | 8.1 | 4 | 4 | 2 | 180 | 60 | 13 | 14.4 | 8.4 | 2000 |
| LVT303012 | 1 | 3.20 | 3.20 | 1.40 | 1.55 | 1.75 | 3.5 | 8.1 | 4 | 4 | 2 | 180 | 60 | 13 | 14.4 | 8.4 | 2000 |
| LVT404012 | 2 | 4.25 | 4.25 | 1.30 | 1.55 | 1.75 | 5.5 | 12 | 8 | 4 | 2 | 178 | 60 | 13 | 13.2 | - | 1000 |
| LVT404015 | 2 | 4.25 | 4.25 | 1.70 | 1.55 | 1.75 | 5.5 | 12 | 8 | 4 | 2 | 178 | 60 | 13 | 13.2 | - | 1000 |
| LVT404026 | 2 | 4.25 | 4.25 | 3.00 | 1.55 | 1.75 | 5.5 | 12 | 8 | 4 | 2 | 178 | 60 | 13 | 13.2 | - | 500 |
| LVT505020 | 2 | 5.25 | 5.25 | 2.20 | 1.55 | 1.75 | 5.5 | 12 | 8 | 4 | 2 | 330 | 100 | 13 | 13.4 | - | 2000 |
| LVT606020 | 2 | 6.25 | 6.25 | 2.20 | 1.55 | 1.75 | 7.5 | 16 | 12 | 4 | 2 | 330 | 100 | 13 | 16.0 | - | 2000 |
| LVT808040 | 2 | 8.25 | 8.25 | 4.15 | 1.55 | 1.75 | 7.5 | 16 | 12 | 4 | 2 | 330 | 100 | 13 | 16.0 | - | 1000 |

单击下面可查看定价，库存，交付和生命周期等信息

[>>CHILISIN\(奇力新\)](#)