



**THE DATASHEET OF
NLC453232T-100K**



Inductors

For Power Line SMD

NLC Series NLC4532 Type

FEATURES

- The NLC series feature low DC resistance and high current handling capacities, making them ideal for power supply line applications.
- They are available in ranging from 2520 to 5650 types.

APPLICATIONS

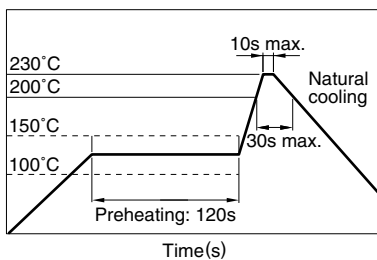
Portable telephones, personal computers, hard disk drives, and other electronic equipment.

SPECIFICATIONS

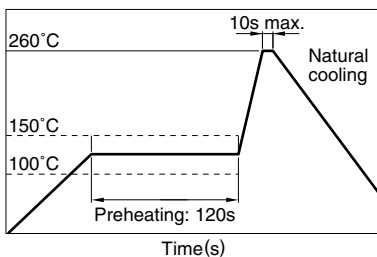
| | |
|-----------------------------|---------------------------------|
| Operating temperature range | -40 to +85°C |
| Storage temperature range | -40 to +85°C [Unit of products] |

RECOMMENDED SOLDERING CONDITIONS

REFLOW SOLDERING



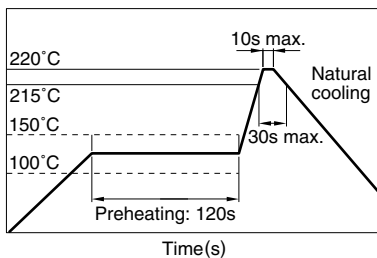
FLOW SOLDERING



IRON SOLDERING

Perform soldering at 250°C on 30W max. within 5 seconds.

VAPOR-PHASING



FLUX AND CLEANING

Rosin-based flux is recommended.

Cleaning Conditions

| | |
|---------|---|
| Solvent | Please select the solvent of this product avoiding a strong acid and a strong alkali, and considering the environments. |
| Time | 2min max. |

PRODUCT IDENTIFICATION

| | | | | |
|-----|--------|-----|-----|-----|
| NLC | 453232 | T- | 2R2 | M |
| (1) | (2) | (3) | (4) | (5) |

(1) Series name

(2) Dimensions L×W×T

| | |
|--------|---------------|
| 453232 | 4.5×3.2×3.2mm |
|--------|---------------|

(3) Packaging style

| | |
|---|--------------|
| T | Taping(reel) |
|---|--------------|

(4) Inductance value

| | |
|-----|------|
| 1R0 | 1μH |
| 330 | 33μH |

(5) Inductance tolerance

| | |
|---|------|
| K | ±10% |
|---|------|

PACKAGING STYLE AND QUANTITIES

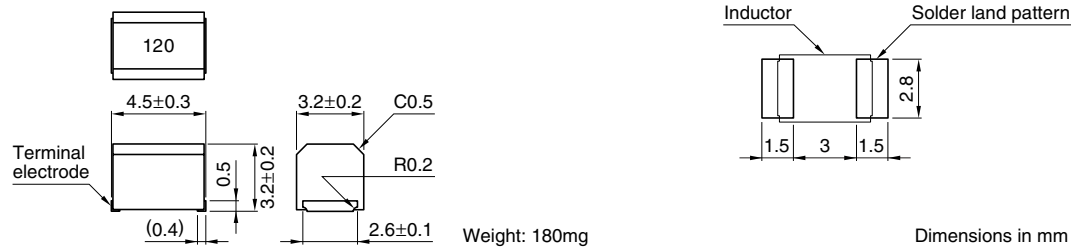
| | |
|-----------------|-----------------|
| Packaging style | Quantity |
| Taping | 500 pieces/reel |

Inductors

NLC Series NLC4532 Type

For Power Line
SMD

SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



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. |
|-----------------|----------------------|--------|---------------------------|-----------------------------------|-----------------------|------------------------|-----------------|
| 1 | ±10% | 10 | 7.96 | 200 | 0.11 | 1050 | NLC453232T-1R0K |
| 1.2 | ±10% | 10 | 7.96 | 160 | 0.12 | 1000 | NLC453232T-1R2K |
| 1.5 | ±10% | 10 | 7.96 | 130 | 0.15 | 950 | NLC453232T-1R5K |
| 1.8 | ±10% | 10 | 7.96 | 100 | 0.16 | 900 | NLC453232T-1R8K |
| 2.2 | ±10% | 10 | 7.96 | 80 | 0.18 | 850 | NLC453232T-2R2K |
| 2.7 | ±10% | 10 | 7.96 | 60 | 0.2 | 800 | NLC453232T-2R7K |
| 3.3 | ±10% | 10 | 7.96 | 45 | 0.22 | 750 | NLC453232T-3R3K |
| 3.9 | ±10% | 10 | 7.96 | 40 | 0.24 | 700 | NLC453232T-3R9K |
| 4.7 | ±10% | 10 | 7.96 | 35 | 0.27 | 650 | NLC453232T-4R7K |
| 5.6 | ±10% | 10 | 7.96 | 30 | 0.3 | 650 | NLC453232T-5R6K |
| 6.8 | ±10% | 10 | 7.96 | 28 | 0.35 | 600 | NLC453232T-6R8K |
| 8.2 | ±10% | 10 | 7.96 | 25 | 0.4 | 600 | NLC453232T-8R2K |
| 10 | ±10% | 10 | 2.52 | 22 | 0.5 | 550 | NLC453232T-100K |
| 12 | ±10% | 10 | 2.52 | 21 | 0.6 | 500 | NLC453232T-120K |
| 15 | ±10% | 10 | 2.52 | 20 | 0.7 | 450 | NLC453232T-150K |
| 18 | ±10% | 10 | 2.52 | 19 | 0.8 | 400 | NLC453232T-180K |
| 22 | ±10% | 10 | 2.52 | 18 | 0.9 | 370 | NLC453232T-220K |
| 27 | ±10% | 10 | 2.52 | 16 | 1.2 | 330 | NLC453232T-270K |
| 33 | ±10% | 10 | 2.52 | 14 | 1.4 | 300 | NLC453232T-330K |
| 39 | ±10% | 10 | 2.52 | 12 | 1.6 | 280 | NLC453232T-390K |
| 47 | ±10% | 10 | 2.52 | 11.5 | 1.9 | 260 | NLC453232T-470K |
| 56 | ±10% | 10 | 2.52 | 11 | 2.2 | 240 | NLC453232T-560K |
| 68 | ±10% | 10 | 2.52 | 10 | 2.6 | 220 | NLC453232T-680K |
| 82 | ±10% | 10 | 2.52 | 9 | 3.5 | 200 | NLC453232T-820K |
| 100 | ±10% | 20 | 0.796 | 8 | 4 | 180 | NLC453232T-101K |
| 120 | ±10% | 20 | 0.796 | 7.5 | 4.5 | 160 | NLC453232T-121K |
| 150 | ±10% | 20 | 0.796 | 7 | 6.5 | 140 | NLC453232T-151K |
| 180 | ±10% | 20 | 0.796 | 6.5 | 7.5 | 120 | NLC453232T-181K |
| 220 | ±10% | 20 | 0.796 | 5.5 | 9 | 120 | NLC453232T-221K |
| 270 | ±10% | 20 | 0.796 | 5 | 11 | 100 | NLC453232T-271K |
| 330 | ±10% | 20 | 0.796 | 4 | 13 | 90 | NLC453232T-331K |

- Test equipment L, Q: YHP4194A IMPEDANCE ANALYZER+YHP16085A+YHP16093B+TF-1, or equivalent
SRF: HP8753C NETWORK ANALYZER (Z_{in}=Z_{out}=50Ω), or equivalent
Rdc: MATSUSHITA VP-2941A DIGITAL MILLIOHM METER, or equivalent

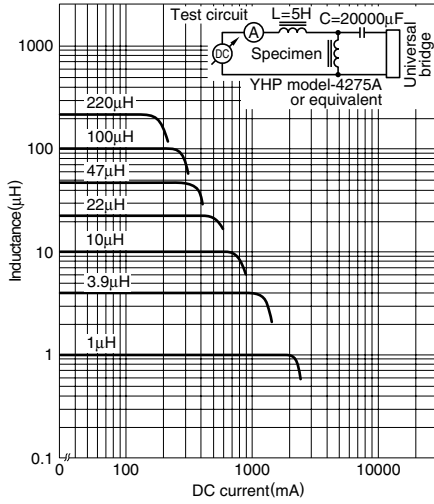
- Marking: Inductance tolerance is omitted to distinguish NL series.

Inductors

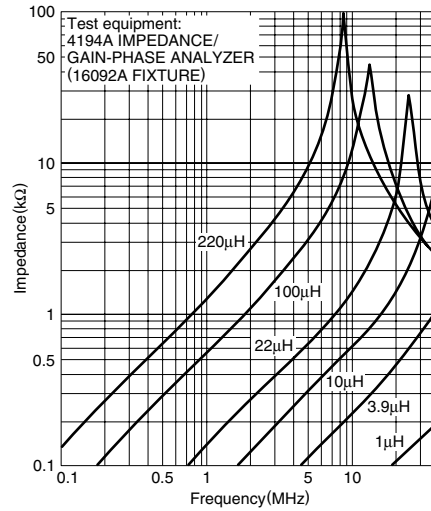
For Power Line
SMD

NLC Series NLC4532 Type

TYPICAL ELECTRICAL CHARACTERISTICS INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



IMPEDANCE vs. FREQUENCY CHARACTERISTICS



Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- ⊖ [View NLC453232T-100K on WIN SOURCE](#)
- ⊖ [TDK Corporation Information](#)

Optimize Your Supply Chain with WIN SOURCE Solutions

- ✓ Global Sourcing Solution
- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management