



**THE DATASHEET OF
NLC252018T-1R0K-N**



Inductors

For Power Line SMD

NLC Series NLC2520 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 4 form factors ranging from 2520 to 5650.

APPLICATIONS

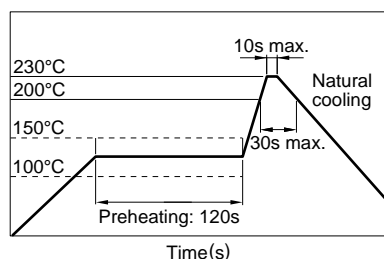
Portable telephones, personal computers, hard disk drives, and other electronic equipment.

SPECIFICATIONS

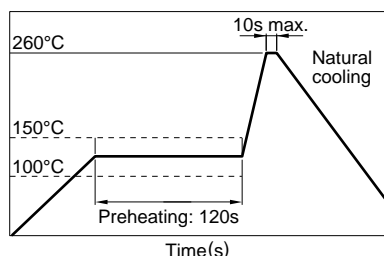
| | |
|-----------------------------|---------------------------------|
| Operating temperature range | -20 to +85°C |
| Storage temperature range | -40 to +85°C [Unit of products] |

RECOMMENDED SOLDERING CONDITIONS

REFLOW SOLDERING



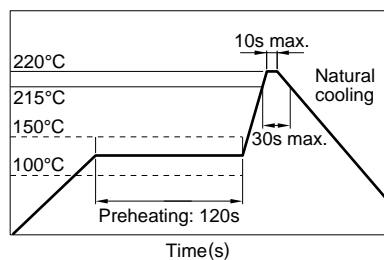
FLOW SOLDERING



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 | Chlorine-based solvent (Do not use acid or alkali solvents.) |
| Time | 2min max. |

PRODUCT IDENTIFICATION

| | | | | |
|-----|--------|-----|-----|-----|
| NLC | 252018 | T- | 2R2 | M |
| (1) | (2) | (3) | (4) | (5) |

(1) Series name

(2) Dimensions L×W×T

| | |
|--------|---------------|
| 252018 | 2.5×2.0×1.8mm |
| 322522 | 3.2×2.5×2.2mm |
| 453232 | 4.5×3.2×3.2mm |
| 565050 | 5.6×5.0×5.0mm |

(3) Packaging style

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

(4) Inductance value

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

(5) Inductance tolerance

| | |
|---|------|
| K | ±10% |
| M | ±20% |

PACKAGING STYLE AND QUANTITIES

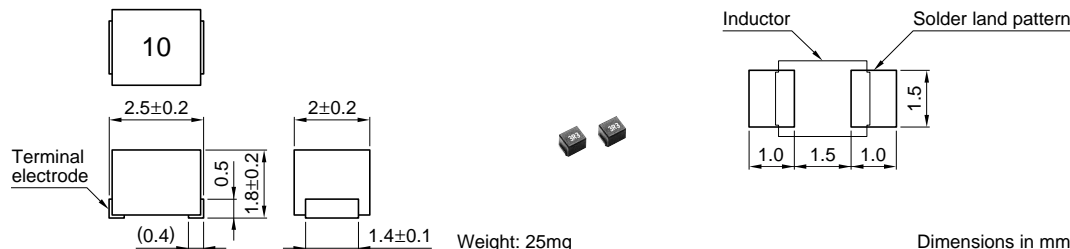
| Packaging style | Type | Quantity |
|-----------------|------------|------------------|
| Taping | NLC252018T | 2000 pieces/reel |
| | NLC322522T | 2000 pieces/reel |
| | NLC453232T | 500 pieces/reel |
| | NLC565050T | 400 pieces/reel |

Inductors

For Power Line
SMD

NLC Series NLC2520 Type

SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



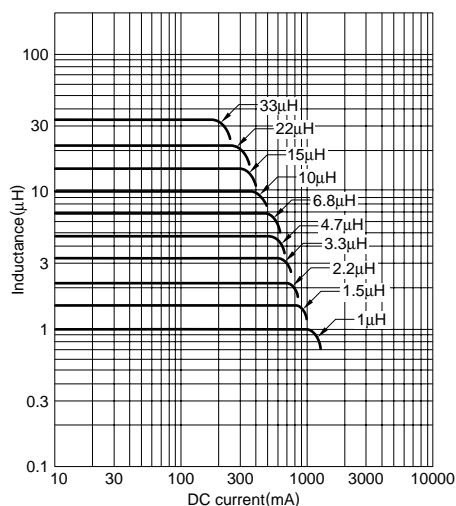
ELECTRICAL CHARACTERISTICS

| Inductance (μH) | Inductance tolerance | Q ref. | Test frequency L, Q (MHz) | Self-resonant frequency (MHz)min. | DC resistance (Ω)±30% | Rated current (mA)max. | Part No. |
|-----------------|----------------------|--------|---------------------------|-----------------------------------|-----------------------|------------------------|-----------------|
| 1 | ±20% | 20 | 7.96 | 200 | 0.34 | 475 | NLC252018T-1R0M |
| 1.5 | ±20% | 20 | 7.96 | 165 | 0.42 | 435 | NLC252018T-1R5M |
| 2.2 | ±20% | 20 | 7.96 | 95 | 0.5 | 390 | NLC252018T-2R2M |
| 3.3 | ±20% | 20 | 7.96 | 55 | 0.65 | 340 | NLC252018T-3R3M |
| 4.7 | ±20% | 20 | 7.96 | 43 | 0.8 | 285 | NLC252018T-4R7M |
| 6.8 | ±20% | 20 | 7.96 | 39 | 1 | 275 | NLC252018T-6R8M |
| 10 | ±10% | 30 | 2.52 | 32 | 1.69 | 210 | NLC252018T-100K |
| 15 | ±10% | 30 | 2.52 | 21 | 2.2 | 175 | NLC252018T-150K |
| 22 | ±10% | 30 | 2.52 | 18 | 2.8 | 160 | NLC252018T-220K |
| 33 | ±10% | 30 | 2.52 | 16 | 4.2 | 120 | NLC252018T-330K |

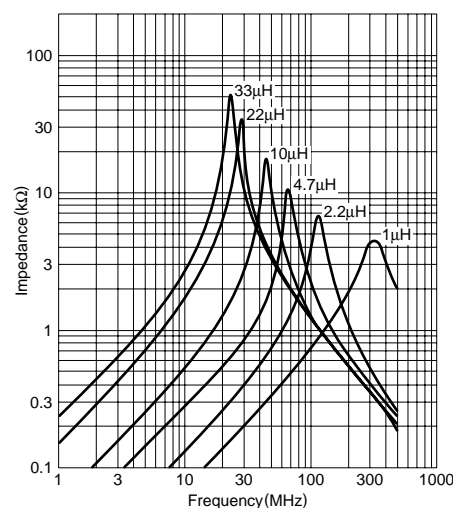
- Test equipment L, Q: YHP4194A IMPEDANCE ANALYZER+YHP16085A+YHP16093B+TF-1, or equivalent
SRF: HP8753C NETWORK ANALYZER (Z_{in}=Z_{out}=50Ω), or equivalent
Rdc: MATSUSHITA VP-2941A DIGITAL MILLIOHM METER, or equivalent

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 NLC252018T-1R0K-N 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