Inductors

For Power Line SMD

NLC Series NLC3225 Type

(We currently recommend that you switch to the NLCV32 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.

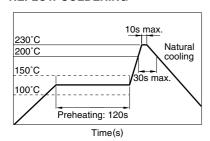
APPLICATIONS

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

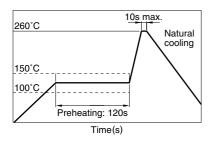
SPECIFICATIONS

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

RECOMMENDED SOLDERING CONDITIONS (LEAD-CONTAINING SOLDER) REFLOW SOLDERING



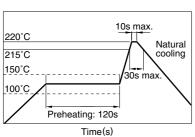
FLOW SOLDERING



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 | 322522 | T- | 2R2 | M |
|-----|--------|-----|-----|-----|
| (1) | (2) | (3) | (4) | (5) |

- (1) Series name
- (2) Dimensions L×W×T

| 3.2×2.3×2.211111 | | 322522 | 3.2×2.5×2.2mm |
|------------------|--|--------|---------------|
|------------------|--|--------|---------------|

(3) Packaging style

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

(4) Inductance value

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

(5) Inductance tolerance

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

PACKAGING STYLE AND QUANTITIES

| Packaging style | Quantity |
|-----------------|------------------|
| Taping | 2000 pieces/reel |

 $[\]bullet$ All specifications are subject to change without notice.

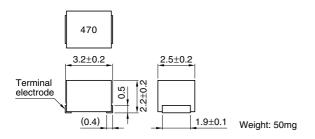
Inductors

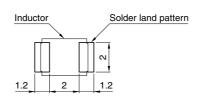
For Power Line SMD

NLC Series NLC3225 Type

(We currently recommend that you switch to the NLCV32 type.)

SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN







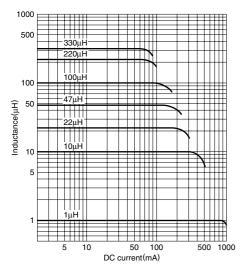
Dimensions in mm

ELECTRICAL CHARACTERISTICS

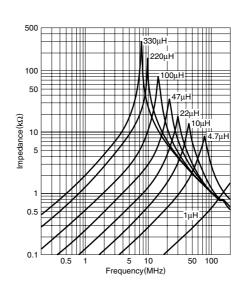
| Inductance | Inductance | Q | Test frequency | Self-resonant | DC resistance | Rated current | Part No. |
|------------|------------|------|----------------|---------------------|---------------|---------------|-----------------|
| (µH) | tolerance | ref. | L, Q (MHz) | frequency (MHz)min. | (Ω)±30% | (mA)max. | |
| 1 | ±20% | 10 | 7.96 | 100 | 0.08 | 850 | NLC322522T-1R0M |
| 1.5 | ±20% | 10 | 7.96 | 80 | 0.11 | 700 | NLC322522T-1R5M |
| 2.2 | ±20% | 10 | 7.96 | 68 | 0.13 | 600 | NLC322522T-2R2M |
| 3.3 | ±20% | 10 | 7.96 | 54 | 0.16 | 500 | NLC322522T-3R3M |
| 4.7 | ±20% | 15 | 7.96 | 46 | 0.2 | 430 | NLC322522T-4R7M |
| 6.8 | ±20% | 15 | 7.96 | 38 | 0.27 | 360 | NLC322522T-6R8M |
| 10 | ±10% | 15 | 2.52 | 30 | 0.36 | 300 | NLC322522T-100K |
| 15 | ±10% | 15 | 2.52 | 26 | 0.56 | 250 | NLC322522T-150K |
| 22 | ±10% | 15 | 2.52 | 21 | 0.77 | 210 | NLC322522T-220K |
| 33 | ±10% | 15 | 2.52 | 17 | 1.1 | 170 | NLC322522T-330K |
| 47 | ±10% | 15 | 2.52 | 14 | 1.64 | 150 | NLC322522T-470K |
| 68 | ±10% | 15 | 2.52 | 12 | 2.8 | 120 | NLC322522T-680K |
| 100 | ±10% | 15 | 0.796 | 10 | 3.7 | 100 | NLC322522T-101K |
| 150 | ±10% | 20 | 0.796 | 8 | 6.1 | 85 | NLC322522T-151K |
| 220 | ±10% | 20 | 0.796 | 7 | 8.4 | 70 | NLC322522T-221K |
| 330 | ±10% | 20 | 0.796 | 6 | 12.3 | 60 | NLC322522T-331K |

[•] Test equipment L, Q: YHP4194A IMPEDANCE ANALYZER+YHP16085A+YHP16093B+TF-1, or equivalent SRF: HP8753C NETWORK ANALYZER (Zin=Zout=50Ω), or equivalent

TYPICAL ELECTRICAL CHARACTERISTICS INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



IMPEDANCE vs. FREQUENCY CHARACTERISTICS



Rdc: MATSUSHITA VP-2941A DIGITAL MILLIOHM METER, or equivalent

[•] Marking: Inductance tolerance is omitted to distinguish NL series.

[•] All specifications are subject to change without notice.