

Inductors

For General Applications

SMD

NL Series NL2016 Type

FEATURES

- The product has good heat durability that withstands lead-free compatible reflow soldering conditions.
- Lead-free material is used for the plating on the terminal.
- The NL series are available in ranging from 2016 to 5650 types.
- Utilizing a miniaturized winding structure, these products provide high Q characteristics.
- Inductance tolerance is $\pm 5\%$.

APPLICATIONS

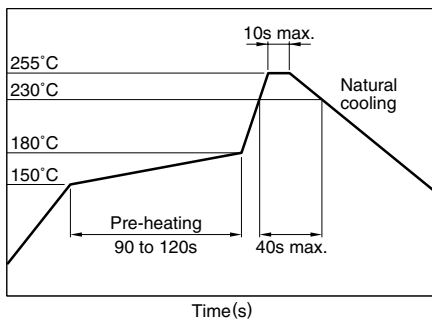
Personal computers, hard disk drives, and other electronic equipment.

SPECIFICATIONS

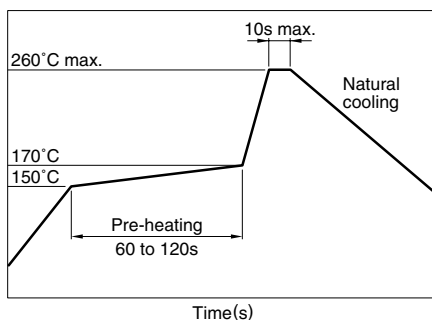
Operating temperature range	-40 to +85°C
Storage temperature range	-40 to +85°C [Unit of products]

RECOMMENDED SOLDERING CONDITIONS

REFLOW SOLDERING



FLOW SOLDERING



IRON SOLDERING

Tip temperature	300 to 350°C
Heating time	3 sec/soldering
Soldering rod specifications	Output: 30W Tip diameter: 1mm

- Based on the above conditions, use a maximum product temperature of 260°C and a maximum accumulated heating time of 10 seconds as a guideline.
- Please contact us for details.

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

NL 201614 T- 2R2 J -PF
(1) (2) (3) (4) (5) (6)

(1)Series name

(2)Dimensions L×W×T

201614	2.1×1.6×1.4mm
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(3)Packaging style

T	Taping (reel)
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(4)Inductance value

1R0	1μH
330	33μH

(5)Inductance tolerance

J	$\pm 5\%$
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(6) Lead-free compatible product

PF	Lead-free compatible product
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PACKAGING STYLE AND QUANTITIES

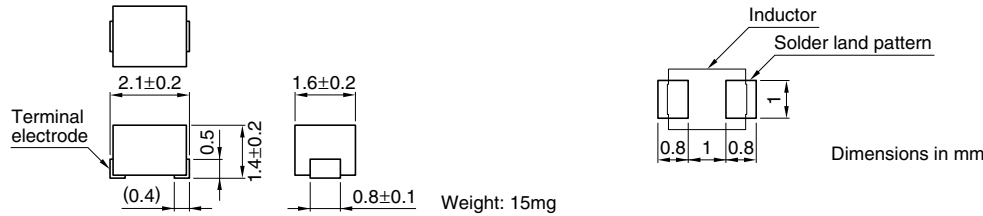
Packaging style	Quantity
Taping	2000 pieces/reel

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For General Applications SMD

SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



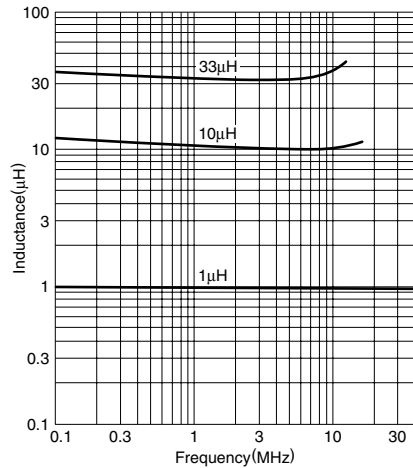
ELECTRICAL CHARACTERISTICS

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	±5%	15	7.96	63	1.2	245	NL201614T-1R0J-PF
1.5	±5%	15	7.96	60	1.45	225	NL201614T-1R5J-PF
2.2	±5%	15	7.96	58	1.8	200	NL201614T-2R2J-PF
3.3	±5%	15	7.96	50	2.3	175	NL201614T-3R3J-PF
4.7	±5%	15	7.96	43	2.8	140	NL201614T-4R7J-PF
6.8	±5%	15	7.96	36	3.4	115	NL201614T-6R8J-PF
10	±5%	10	2.52	30	4.7	98	NL201614T-100J-PF
15	±5%	10	2.52	23	6.5	80	NL201614T-150J-PF
22	±5%	10	2.52	20	8	68	NL201614T-220J-PF
33	±5%	10	2.52	17	10.7	60	NL201614T-330J-PF

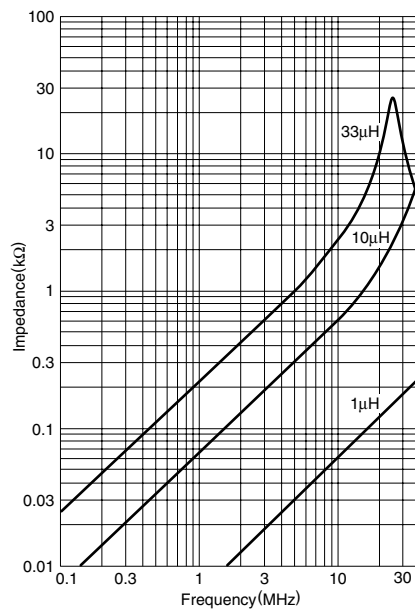
- Inductance tolerance is only standard.
- Test equipment L, Q: YHP4194A IMPEDANCE ANALYZER (16085A+16093B+TDK TF-1)
SRF: HP8753C NETWORK ANALYZER
Rdc: MATSUSHITA VP-2941A DIGITAL MILLIOHM METER

TYPICAL ELECTRICAL CHARACTERISTICS

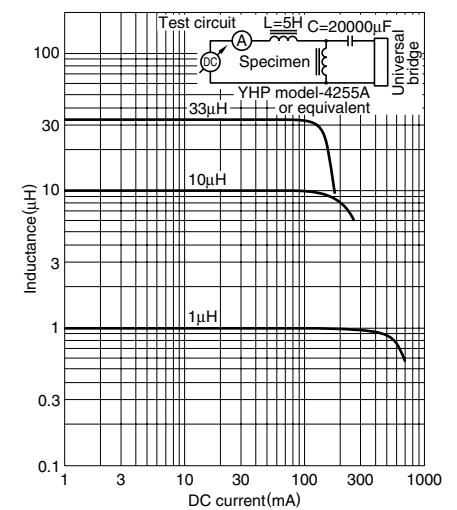
INDUCTANCE vs. FREQUENCY CHARACTERISTICS



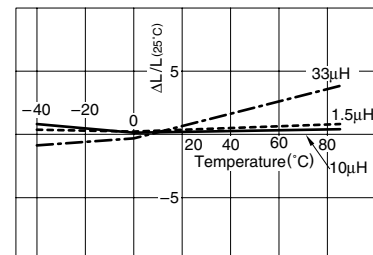
IMPEDANCE vs. FREQUENCY CHARACTERISTICS



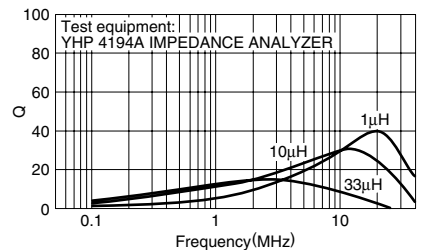
INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS



INDUCTANCE CHANGE vs. TEMPERATURE CHARACTERISTICS



Q vs. FREQUENCY CHARACTERISTICS



• All specifications are subject to change without notice.