

Inductors

For General Applications
SMD

NL Series NL5650 Type

FEATURES

- The NL series are available in ranging from 2016 to 5650 type.
- Utilizing a miniaturized winding structure, these products provide high Q characteristics.
- Inductance tolerance is $\pm 5\%$.

APPLICATIONS

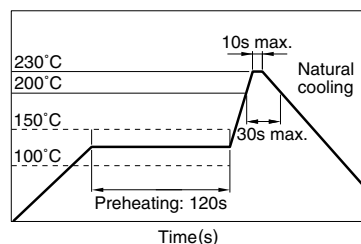
Personal computers, hard disk drives, and other electronic equipment.

SPECIFICATIONS

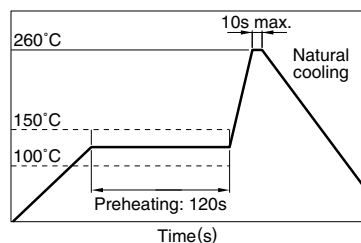
Operating temperature range -40 to $+85^{\circ}\text{C}$
Storage temperature range -40 to $+85^{\circ}\text{C}$ [Unit of products]

RECOMMENDED SOLDERING CONDITIONS

REFLOW SOLDERING



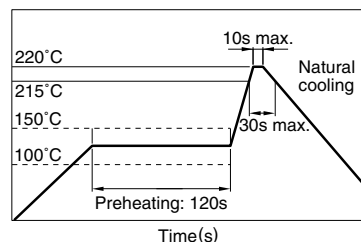
FLOW SOLDERING



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

NL	565050	T-	122	J
(1)	(2)	(3)	(4)	(5)

(1)Series name

(2)Dimensions L×W×T

565050 5.6×5.0×5.0mm

(3)Packaging style

T Taping (reel)

(4)Inductance value

122 1.2mH
103 10mH

(5)Inductance tolerance

J $\pm 5\%$

PACKAGING STYLE AND QUANTITIES

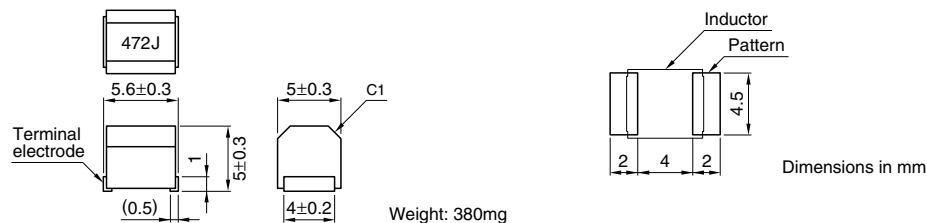
Packaging style	Quantity
Taping	400 pieces/reel

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SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



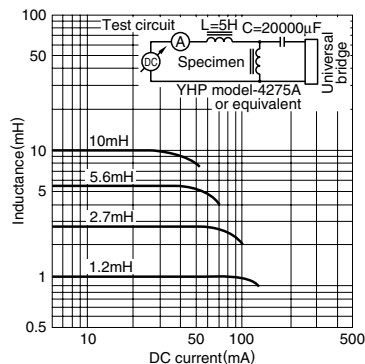
ELECTRICAL CHARACTERISTICS

Inductance (mH)	Inductance tolerance	Q min.	Test frequency L, Q (MHz)	Self-resonant frequency (MHz)min.	DC resistance (Ω)max.	Rated current (mA)max.	Part No.
1.2	$\pm 5\%$	30	0.252	1.5	17	75	NL565050T-122J
1.5	$\pm 5\%$	30	0.252	1.4	20	70	NL565050T-152J
1.8	$\pm 5\%$	30	0.252	1.3	30	60	NL565050T-182J
2.2	$\pm 5\%$	30	0.252	1.2	35	55	NL565050T-222J
2.7	$\pm 5\%$	30	0.252	1.1	55	45	NL565050T-272J
3.3	$\pm 5\%$	30	0.252	1	60	40	NL565050T-332J
3.9	$\pm 5\%$	30	0.252	1	70	38	NL565050T-392J
4.7	$\pm 5\%$	30	0.252	0.9	78	36	NL565050T-472J
5.6	$\pm 5\%$	30	0.252	0.8	85	33	NL565050T-562J
6.8	$\pm 5\%$	30	0.252	0.7	110	30	NL565050T-682J
8.2	$\pm 5\%$	30	0.252	0.6	125	28	NL565050T-822J
10	$\pm 5\%$	20	0.0796	0.5	150	25	NL565050T-103J

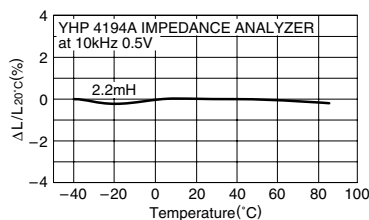
- Inductance tolerance is only standard.
- Test equipment L, Q: YHP4194A IMPEDANCE ANALYZER (16085A+16093B+TDK TF-1)
SRF: HP8753C NETWORK ANALYZER ($Z_{in}=Z_{out}=50\Omega$)
Rdc: MATSUSHITA VP-2941A DIGITAL MILLIOHM METER

TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



INDUCTANCE CHANGE vs. TEMPERATURE CHARACTERISTICS



Q vs. FREQUENCY CHARACTERISTICS

