

SMD Inductors(Coils) For Signal Line(Wound)

Conformity to RoHS Directive

NL Series NL5650

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 product uses metal terminals, which realize excellent connection reliability.
- It is a product conforming to RoHS directive.

APPLICATIONS

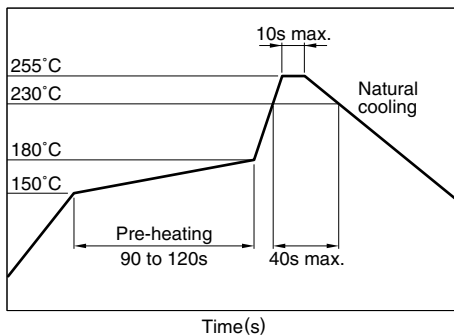
- Electronic equipment used in communication infrastructures including xDSL and mobile base stations.
- Audio-visual equipment including TVs and VCRs.
- Other electronic equipment including HDDs and ODDs.

SPECIFICATIONS

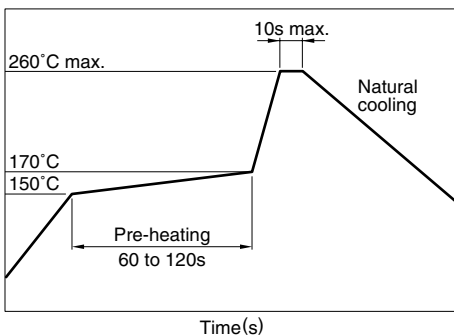
Operating temperature range	-40 to +105°C [Including self-temperature rise]
Storage temperature range	-40 to +105°C

RECOMMENDED SOLDERING CONDITIONS

REFLOW SOLDERING



FLOW SOLDERING



IRON SOLDERING

Tip temperature	300 to 350°C
Heating time	3 seconds/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.

PRODUCT IDENTIFICATION

NL	565050	T-	122	J	-	PF
(1)	(2)	(3)	(4)	(5)	(6)	

(1)Series name

(2)Dimensions

565050	5.6×5.0×5.0mm (L×W×T)
--------	-----------------------

(3)Packaging style

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

(4)Inductance value

122	1.2mH
103	10mH

(5)Inductance tolerance

J	±5%
---	-----

(6) Lead-free compatible product

PF	Lead-free compatible product
----	------------------------------

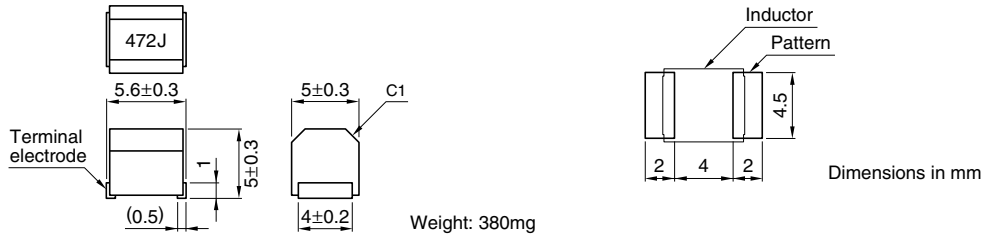
PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	400 pieces/reel

• Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

• All specifications are subject to change without notice.

SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



ELECTRICAL CHARACTERISTICS

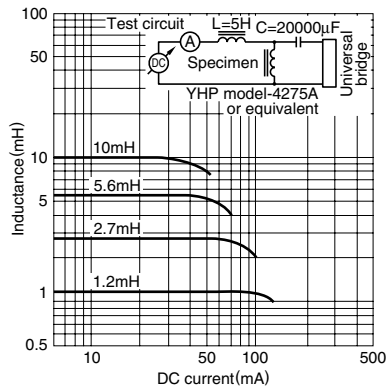
Inductance (mH)	Inductance tolerance	Q min.	Test frequency L, Q (MHz)	Self-resonant frequency (MHz)min.	DC resistance (Ω)max.	Rated current* (mA)max.	Part No.
1.2	$\pm 5\%$	30	0.252	1.5	17	75	NL565050T-122J-PF
1.5	$\pm 5\%$	30	0.252	1.4	20	70	NL565050T-152J-PF
1.8	$\pm 5\%$	30	0.252	1.3	30	60	NL565050T-182J-PF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

* Rated current: Value obtained when current flows and the temperature has risen to 20°C or when DC current flows and the initial value of inductance has fallen by 10%, whichever is smaller.

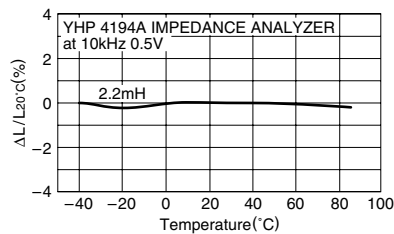
- Test equipment L, Q: YHP4194A IMPEDANCE ANALYZER (16085A+16093B+TDK TF-1)
SRF: HP8753C NETWORK ANALYZER ($Z_{in}=Z_{out}=50\Omega$)
Rdc: MATSUSHITA VP-2941A DIGITAL MILLIOHM METER

TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



INDUCTANCE CHANGE vs. TEMPERATURE CHARACTERISTICS



Q vs. FREQUENCY CHARACTERISTICS

