Inductors

For High Frequency
SMD

NLH Series NLH2520 Type

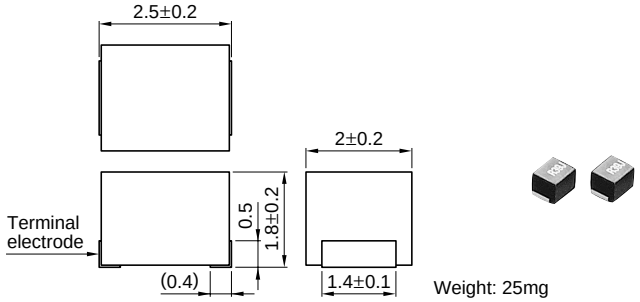
FEATURES

- Supports operating frequencies of up to 2GHz with nominal inductance values from 10 to 820nH.
- Compact winding structure ensures high Q.
- Inductance tolerance is ±5 percent.

APPLICATIONS

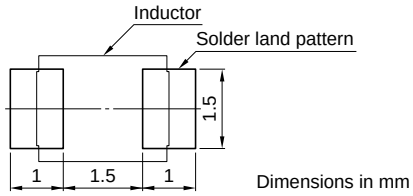
High-frequency circuits for portable telephones, pagers, and other mobile communication equipment.

SHAPES AND DIMENSIONS



Weight: 25mg

RECOMMENDED PC BOARD PATTERN



Dimensions in mm

SPECIFICATIONS

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

PRODUCT IDENTIFICATION

NLH	252018	T-	022	J
(1)	(2)	(3)	(4)	(5)

(1) Series name

(2) Dimensions L×W×T

252018	2.5×2.0×1.8mm

(3) Packaging style

T	Taping [reel]

(4) Inductance value

022	22nH
R10	100nH

(5) Inductance tolerance

J	±5%

PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	2000 pieces/reel

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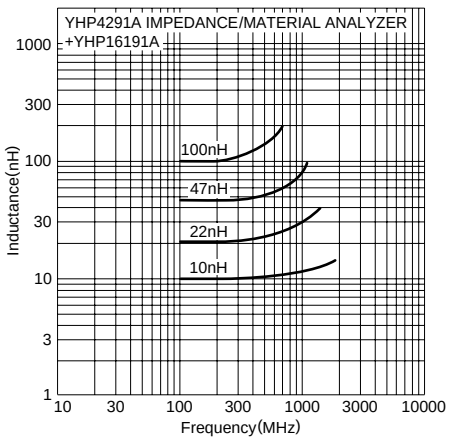
ELECTRICAL CHARACTERISTICS

Inductance (nH)	Inductance tolerance	Q min.	Test frequency L, Q (MHz)	Self-resonant frequency (GHz)min.	DC resistance (Ω)max.	Rated current (mA)max.	Part No.
10	±5%	25	100	2.15	0.26	530	NLH252018T-010J
12	±5%	25	100	2.05	0.27	500	NLH252018T-012J
15	±5%	25	100	2	0.29	480	NLH252018T-015J
18	±5%	25	100	1.85	0.31	450	NLH252018T-018J
22	±5%	25	100	1.65	0.37	420	NLH252018T-022J
27	±5%	25	100	1.55	0.4	410	NLH252018T-027J
33	±5%	25	100	1.45	0.42	400	NLH252018T-033J
39	±5%	25	100	1.35	0.45	380	NLH252018T-039J
47	±5%	25	100	1.2	0.5	360	NLH252018T-047J
56	±5%	25	100	1.1	0.6	340	NLH252018T-056J
68	±5%	25	100	1.05	0.65	320	NLH252018T-068J
82	±5%	25	100	0.9	0.75	300	NLH252018T-082J
100	±5%	25	100	0.8	0.8	280	NLH252018T-R10J
120	±5%	30	25.2	0.7	0.38	550	NLH252018T-R12J
150	±5%	30	25.2	0.55	0.42	500	NLH252018T-R15J
180	±5%	30	25.2	0.5	0.45	475	NLH252018T-R18J
220	±5%	35	25.2	0.45	0.5	450	NLH252018T-R22J
270	±5%	35	25.2	0.425	0.58	425	NLH252018T-R27J
330	±5%	40	25.2	0.4	0.68	400	NLH252018T-R33J
390	±5%	40	25.2	0.375	0.73	375	NLH252018T-R39J
470	±5%	40	25.2	0.35	0.83	350	NLH252018T-R47J
560	±5%	40	25.2	0.325	0.93	325	NLH252018T-R56J
680	±5%	40	25.2	0.18	0.98	300	NLH252018T-R68J
820	±5%	40	25.2	0.12	1.05	260	NLH252018T-R82J

- Test equipment
  Inductance, Q[10 to 100nH] : YHP4291A IMPEDANCE/MATERIAL ANALYZER+YHP16191A, or equivalent
  [120 to 820nH] : YHP4194A IMPEDANCE ANALYZER+YHP16085A+YHP16093B+TF-1, or equivalent
  SRF: HP8753C NETWORK ANALYZER(Zin, Zout=50Ω), or equivalent
  Rdc : MATSUSHITA VP-2941A DIGITAL MILLIOHM METER, or equivalent

TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE vs. FREQUENCY CHARACTERISTICS



Q vs. FREQUENCY CHARACTERISTICS