

Inductors(Coils)

For General Signals/Decoupling

NLV/NL (For Signal Line) series

NLHV (For Signal Line) series

NLFV/NLFC (For Signal Line) series

NLCV/NLC (Decoupling) series

Type:	NLV25	2520[1008 inch]* (STD)
	NLV32	3225[1210 inch] (STD)
	NL453232	4532[1812 inch] (STD)
	NL565050	5650[2220 inch] (STD)
	NLHV25	2520[1008 inch] (High Frequency Type)
	NLFV25	2520[1008 inch] (Shielded Type)
	NLFV32	3225[1210 inch] (Shielded Type)
	NLFC453232	4532[1812 inch] (Shielded Type)
	NLCV25	2520[1008 inch] (For Current)
	NLCV32	3225[1210 inch]
	NLCV25T-R	2520[1008 inch]
	NLCV32T-R	3225[1210 inch]
	NLC453232	4532[1812 inch]
	NLC565050	5650[2220 inch]

* Dimensions Code JIS[EIA]

Issue date: January 2011

- All specifications are subject to change without notice.
- 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.

SMD Inductors(Coils) For Signal Line(Wound)

Conformity to RoHS Directive

NLV Series NLV25

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 electrical characteristics, reliability, shape and pad shape are the same as the previous NL series.
- The product uses metal terminals, which realize excellent connection reliability.
- Highly heat resistant thermoplastic resin is used to form the exterior package.
- From 0.01 μ H to 100 μ H, all of the products in the E-12 series are J(\pm 5%) tolerance products.
- This product is in compliance with the RoHS Directive. Other products with specifications that do not include exemption regulations are also available.

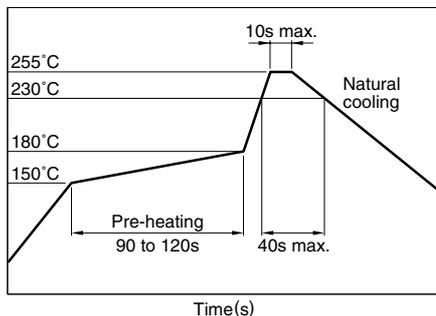
APPLICATIONS

- Audio-visual equipment including TVs, VCRs and digital cameras.
- Electronic equipment used in communication infrastructures including xDSL and mobile base stations.
- Electronic equipment used in onboard automobile equipment including car audio and ECU systems.
- Other electronic equipment including HDDs and ODDs.

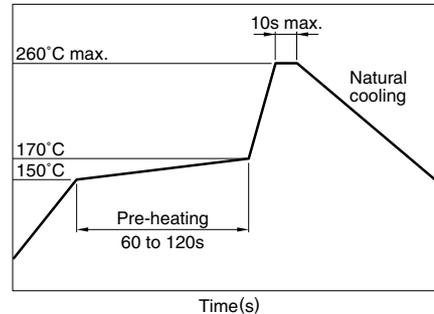
SPECIFICATIONS

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

NLV	25	T-	2R2	J	-	PF
(1)	(2)	(3)	(4)	(5)	(6)	

(1) Series name

(2) Dimensions

25	2.5×2.0×1.8mm (L×W×T)
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(3) Packaging style

T	Taping (reel)
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(4) Inductance value

010	0.01 μ H
R10	0.1 μ H
1R0	1 μ H
100	10 μ H
101	100 μ H

(5) Inductance tolerance

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

PF	Conformity to RoHS directive, exemption regulations apply
EF	Conformity to RoHS directive

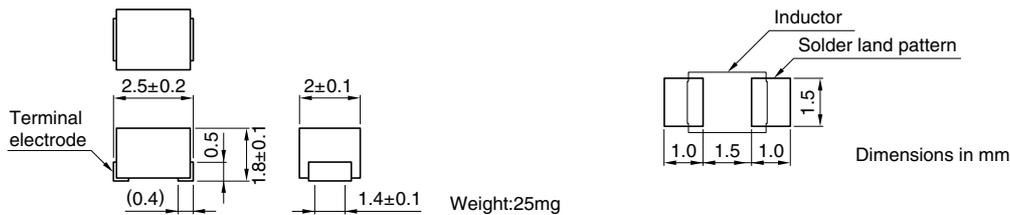
PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	2000 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 (μH)	Inductance tolerance	Q typ.	Test frequency L,Q (MHz)	Self-resonant frequency (MHz)min.	DC resistance (Ω)max.	Rated current*1 (mA)max.	Part No.
0.01	±5%	15	100	2150	0.26	530	NLV25T-010J-□*2
0.012	±5%	15	100	2050	0.27	500	NLV25T-012J-□
0.015	±5%	15	100	2000	0.29	480	NLV25T-015J-□
0.018	±5%	15	100	1850	0.31	450	NLV25T-018J-□
0.022	±5%	15	100	1650	0.37	420	NLV25T-022J-□
0.027	±5%	15	100	1550	0.4	410	NLV25T-027J-□
0.033	±5%	20	100	1450	0.42	400	NLV25T-033J-□
0.039	±5%	20	100	1350	0.45	380	NLV25T-039J-□
0.047	±5%	20	100	1200	0.5	360	NLV25T-047J-□
0.056	±5%	20	100	1100	0.6	340	NLV25T-056J-□
0.068	±5%	20	100	1050	0.65	320	NLV25T-068J-□
0.082	±5%	20	100	900	0.75	300	NLV25T-082J-□
0.1	±5%	20	100	800	0.8	280	NLV25T-R10J-□
0.12	±5%	30	25.2	700	0.3	550	NLV25T-R12J-□
0.15	±5%	30	25.2	550	0.35	500	NLV25T-R15J-□
0.18	±5%	30	25.2	500	0.4	460	NLV25T-R18J-□
0.22	±5%	30	25.2	450	0.5	430	NLV25T-R22J-□
0.27	±5%	30	25.2	425	0.55	420	NLV25T-R27J-□
0.33	±5%	30	25.2	400	0.6	400	NLV25T-R33J-□
0.39	±5%	30	25.2	375	0.65	375	NLV25T-R39J-□
0.47	±5%	30	25.2	350	0.68	350	NLV25T-R47J-□
0.56	±5%	30	25.2	325	0.75	325	NLV25T-R56J-□
0.68	±5%	30	25.2	300	0.85	300	NLV25T-R68J-□
0.82	±5%	30	25.2	260	1	260	NLV25T-R82J-□
1	±5%	30	7.96	245	1.1	245	NLV25T-1R0J-□
1.2	±5%	30	7.96	230	1.2	230	NLV25T-1R2J-□
1.5	±5%	30	7.96	182	1.3	220	NLV25T-1R5J-□
1.8	±5%	30	7.96	135	1.45	210	NLV25T-1R8J-□
2.2	±5%	30	7.96	105	1.55	200	NLV25T-2R2J-□
2.7	±5%	30	7.96	70	1.7	195	NLV25T-2R7J-□
3.3	±5%	30	7.96	55	1.9	185	NLV25T-3R3J-□
3.9	±5%	30	7.96	48	2.1	180	NLV25T-3R9J-□
4.7	±5%	30	7.96	43	2.3	175	NLV25T-4R7J-□
5.6	±5%	25	7.96	42	2.5	170	NLV25T-5R6J-□
6.8	±5%	25	7.96	39	2.7	165	NLV25T-6R8J-□
8.2	±5%	25	7.96	36	3.05	160	NLV25T-8R2J-□
10	±5%	25	2.52	33	3.5	155	NLV25T-100J-□
12	±5%	25	2.52	30	3.8	150	NLV25T-120J-□
15	±5%	25	2.52	26	4.4	140	NLV25T-150J-□
18	±5%	25	2.52	24	4.8	130	NLV25T-180J-□
22	±5%	25	2.52	22	5.5	125	NLV25T-220J-□
27	±5%	25	2.52	21	6.3	115	NLV25T-270J-□
33	±5%	25	2.52	20	7.1	110	NLV25T-330J-□
39	±5%	20	2.52	18	9.5	90	NLV25T-390J-□

*1 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.

*2 □: Please specify lead-free compatible product, PF (Conformity to RoHS directive, exemption regulations apply) or EF (Conformity to RoHS directive)

- Test equipment L, Q: YHP4191A IMPEDANCE ANALYZER (16092A) [$L \leq 0.1\mu\text{H}$]
YHP4194A IMPEDANCE ANALYZER (16085A+16093B+TDK TF-1) [$L \geq 0.12\mu\text{H}$]
SRF:HP8753C NETWORK ANALYZER
Rdc:MATSUSHITA VP-2941A DIGITAL MILLIOHM METER

ELECTRICAL CHARACTERISTICS

Inductance (μH)	Inductance tolerance	Q typ.	Test frequency L,Q (MHz)	Self-resonant frequency (MHz)min.	DC resistance (Ω)max.	Rated current*1 (mA)max.	Part No.
47	±5%	20	2.52	17	11.1	80	NLV25T-470J-□*2
56	±5%	20	2.52	16	12.1	75	NLV25T-560J-□
68	±5%	20	2.52	15	16.6	70	NLV25T-680J-□
82	±5%	20	2.52	13	19	66	NLV25T-820J-□
100	±5%	15	0.796	12	21	60	NLV25T-101J-□

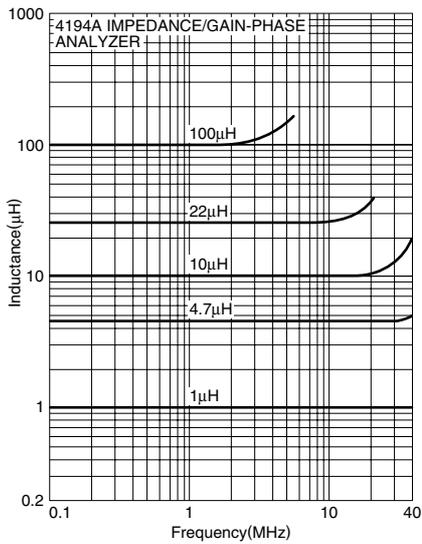
*1 Rated current: Value obtained when current flows and the temperature has risen to 20°C or when DC current flows and the initial value of inductance has fallen by 10%, whichever is smaller.

*2 □: Please specify lead-free compatible product, PF (Conformity to RoHS directive, exemption regulations apply) or EF (Conformity to RoHS directive)

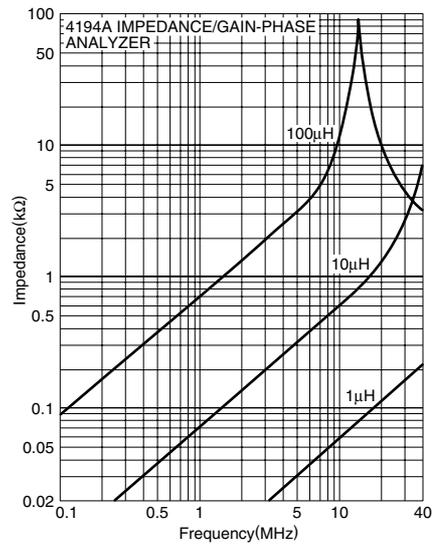
- Test equipment L, Q: HP4194A IMPEDANCE/GAIN PHASE ANALYZER(16085A+16093B+TDK TF-1)
 SRF: HP8753C NETWORK ANALYZER
 Rdc: MATSUSHITA VP-2941A DIGITAL MILLIOHM METER

TYPICAL ELECTRICAL CHARACTERISTICS

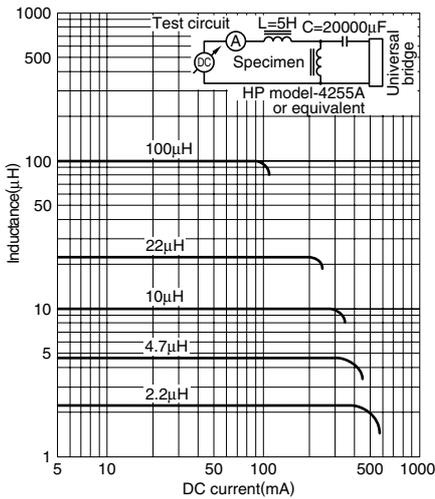
INDUCTANCE vs. FREQUENCY CHARACTERISTICS



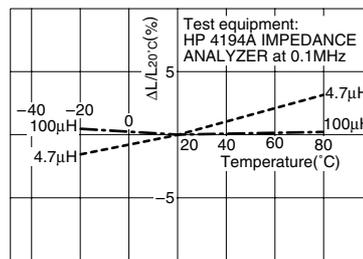
IMPEDANCE vs. FREQUENCY CHARACTERISTICS



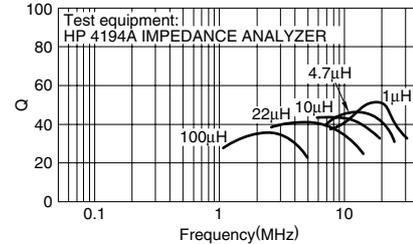
INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



INDUCTANCE CHANGE vs. TEMPERATURE CHARACTERISTICS



Q vs. FREQUENCY CHARACTERISTICS



SMD Inductors(Coils) For Signal Line(Wound)

Conformity to RoHS Directive

NLV Series NLV32

FEATURES

- This is a renewed version of NL322522.
- 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 electrical characteristics, reliability, shape and pad shape are the same as the previous NL series.
- The product uses metal terminals, which realize excellent connection reliability.
- Highly heat resistant thermoplastic resin is used to form the exterior package.
- From 0.01 μ H to 470 μ H, all of the products in the E-12 series are J(\pm 5%) tolerance products.
- This product is in compliance with the RoHS Directive. Other products with specifications that do not include exemption regulations are also available.

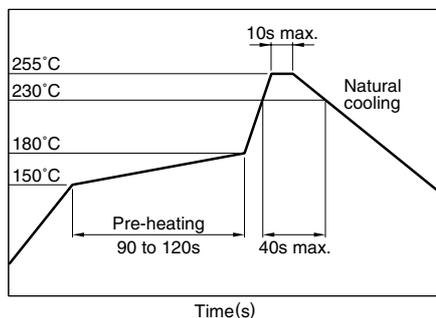
APPLICATIONS

- Audio-visual equipment including TVs, VCRs and digital cameras.
- Electronic equipment used in communication infrastructures including xDSL and mobile base stations.
- Electronic equipment used in onboard automobile equipment including car audio and ECU systems.
- Other electronic equipment including HDDs and ODDs.

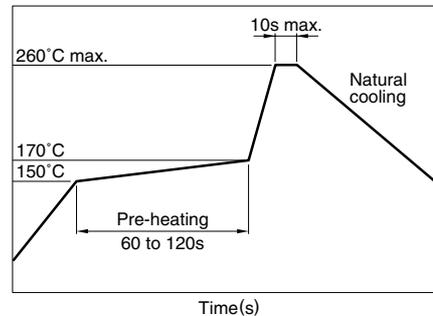
SPECIFICATIONS

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

NLV 32 T- 2R2 J - PF
(1) (2) (3) (4) (5) (6)

(1) Series name

(2) Dimensions

32 3.2×2.5×2.2mm (L×W×T)

(3) Packaging style

T Taping (reel)

(4) Inductance value

010	0.01 μ H
R10	0.1 μ H
1R0	1 μ H
100	10 μ H
101	100 μ H

(5) Inductance tolerance

J \pm 5%

(6) Lead-free compatible product

PF	Conformity to RoHS directive, exemption regulations apply
EF	Conformity to RoHS directive

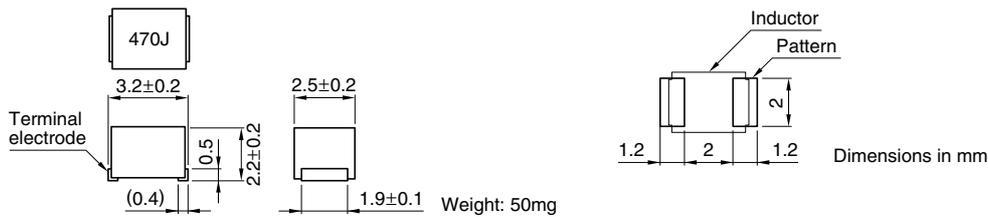
PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	2000 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(μH)	Inductance tolerance	Q min.	Test frequency L,Q (MHz)	Self-resonant frequency (MHz)min.	DC resistance (Ω)max.	Rated current*1 (mA)max.	Part No.
0.01	±5%	15	100	2500	0.13	450	NLV32T-010J-□*2
0.012	±5%	17	100	2300	0.14	450	NLV32T-012J-□
0.015	±5%	19	100	2100	0.16	450	NLV32T-015J-□
0.018	±5%	21	100	1900	0.18	450	NLV32T-018J-□
0.022	±5%	23	100	1700	0.2	450	NLV32T-022J-□
0.027	±5%	23	100	1500	0.22	450	NLV32T-027J-□
0.033	±5%	25	100	1400	0.24	450	NLV32T-033J-□
0.039	±5%	25	100	1300	0.27	450	NLV32T-039J-□
0.047	±5%	26	100	1200	0.3	450	NLV32T-047J-□
0.056	±5%	26	100	1100	0.33	450	NLV32T-056J-□
0.068	±5%	27	100	1000	0.36	450	NLV32T-068J-□
0.082	±5%	27	100	900	0.4	450	NLV32T-082J-□
0.1	±5%	28	100	700	0.44	450	NLV32T-R10J-□
0.12	±5%	30	25.2	500	0.22	450	NLV32T-R12J-□
0.15	±5%	30	25.2	450	0.25	450	NLV32T-R15J-□
0.18	±5%	30	25.2	400	0.28	450	NLV32T-R18J-□
0.22	±5%	30	25.2	350	0.32	450	NLV32T-R22J-□
0.27	±5%	30	25.2	320	0.36	450	NLV32T-R27J-□
0.33	±5%	30	25.2	300	0.4	450	NLV32T-R33J-□
0.39	±5%	30	25.2	250	0.45	450	NLV32T-R39J-□
0.47	±5%	30	25.2	220	0.5	450	NLV32T-R47J-□
0.56	±5%	30	25.2	180	0.55	450	NLV32T-R56J-□
0.68	±5%	30	25.2	160	0.6	450	NLV32T-R68J-□
0.82	±5%	30	25.2	140	0.65	450	NLV32T-R82J-□
1	±5%	30	7.96	120	0.7	400	NLV32T-1R0J-□
1.2	±5%	30	7.96	100	0.75	390	NLV32T-1R2J-□
1.5	±5%	30	7.96	85	0.85	370	NLV32T-1R5J-□
1.8	±5%	30	7.96	80	0.9	350	NLV32T-1R8J-□
2.2	±5%	30	7.96	75	1	320	NLV32T-2R2J-□
2.7	±5%	30	7.96	70	1.1	290	NLV32T-2R7J-□
3.3	±5%	30	7.96	60	1.2	260	NLV32T-3R3J-□
3.9	±5%	30	7.96	55	1.3	250	NLV32T-3R9J-□
4.7	±5%	30	7.96	50	1.5	220	NLV32T-4R7J-□
5.6	±5%	30	7.96	45	1.6	200	NLV32T-5R6J-□
6.8	±5%	30	7.96	40	1.8	180	NLV32T-6R8J-□
8.2	±5%	30	7.96	35	2	170	NLV32T-8R2J-□
10	±5%	30	2.52	30	2.1	150	NLV32T-100J-□
12	±5%	30	2.52	20	2.5	140	NLV32T-120J-□

*1 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.

*2 □: Please specify lead-free compatible product, PF (Conformity to RoHS directive, exemption regulations apply) or EF (Conformity to RoHS directive)

- Test equipment L, Q: YHP4191A IMPEDANCE ANALYZER (16092A) [$L \leq 0.1\mu\text{H}$]
YHP4194A IMPEDANCE ANALYZER (16085A+16093B+TDK TF-1) [$L \geq 0.12\mu\text{H}$]
SRF:HP8753C NETWORK ANALYZER
Rdc:MATSUSHITA VP-2941A DIGITAL MILLIOHM METER

ELECTRICAL CHARACTERISTICS

Inductance(μH)	Inductance tolerance	Q min.	Test frequency L,Q (MHz)	Self-resonant frequency (MHz)min.	DC resistance (Ω)max.	Rated current*1 (mA)max.	Part No.
15	±5%	30	2.52	20	2.8	130	NLV32T-150J-□*2
18	±5%	30	2.52	20	3.3	120	NLV32T-180J-□
22	±5%	30	2.52	20	3.7	110	NLV32T-220J-□
27	±5%	30	2.52	20	5	80	NLV32T-270J-□
33	±5%	30	2.52	17	5.6	70	NLV32T-330J-□
39	±5%	30	2.52	16	6.4	65	NLV32T-390J-□
47	±5%	30	2.52	15	7	60	NLV32T-470J-□
56	±5%	30	2.52	13	8	55	NLV32T-560J-□
68	±5%	30	2.52	12	9	50	NLV32T-680J-□
82	±5%	30	2.52	11	10	45	NLV32T-820J-□
100	±5%	20	0.796	10	10	40	NLV32T-101J-□
120	±5%	20	0.796	10	11	70	NLV32T-121J-□
150	±5%	20	0.796	8	15	65	NLV32T-151J-□
180	±5%	20	0.796	7	17	60	NLV32T-181J-□
220	±5%	20	0.796	7	21	50	NLV32T-221J-□
270	±5%	20	0.796	6	28	45	NLV32T-271J-□
330	±5%	20	0.796	5	34	40	NLV32T-331J-□
390	±5%	20	0.796	5	36	35	NLV32T-391J-□
470	±5%	20	0.796	4	40	25	NLV32T-471J-□

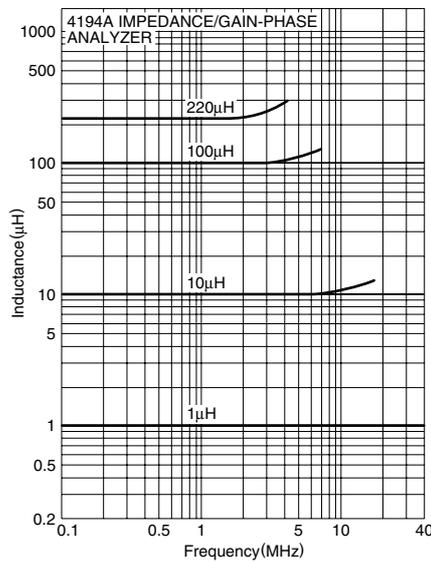
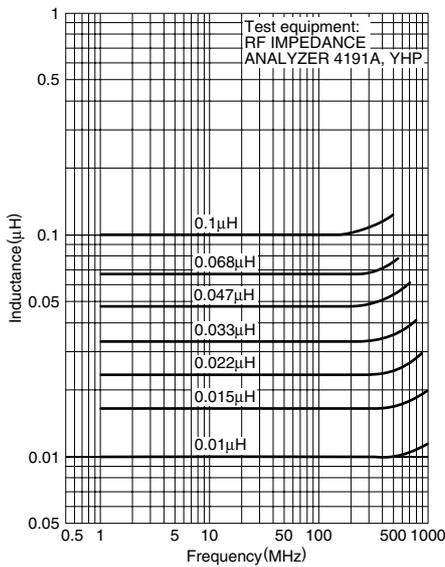
*1 Rated current: Value obtained when current flows and the temperature has risen to 20°C or when DC current flows and the initial value of inductance has fallen by 10%, whichever is smaller.

*2 □: Please specify lead-free compatible product, PF (Conformity to RoHS directive, exemption regulations apply) or EF (Conformity to RoHS directive)

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

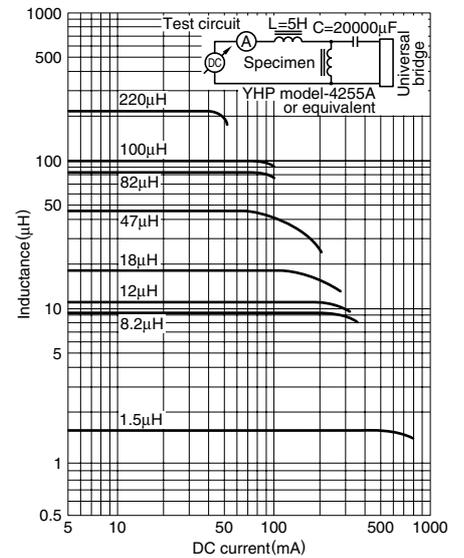
TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE vs. FREQUENCY CHARACTERISTICS



INDUCTANCE CHANGE vs. DC

SUPERPOSITION CHARACTERISTICS



SMD Inductors(Coils) For Signal Line(Wound)

Conformity to RoHS Directive

NL Series NL453232

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.
- From 1 μ H to 1000 μ H, all of the products in the E-12 series are J(\pm 5%) tolerance products.
- It is a product conforming to RoHS directive.

APPLICATIONS

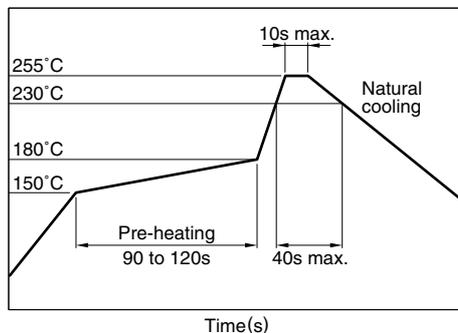
- Electronic equipment used in communication infrastructures including xDSL and mobile base stations.
- Audio-visual equipment including TVs and VCRs.
- Other electronic equipment including HDDs and ODDs.

SPECIFICATIONS

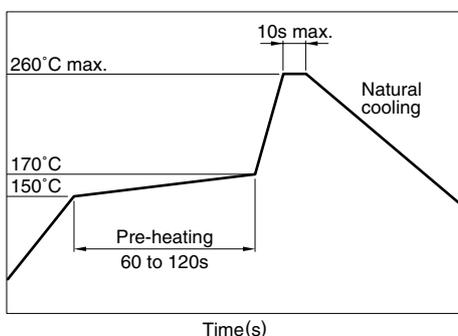
Operating temperature range	-40 to +105°C [Including self-temperature rise]
Storage temperature range	-40 to +105°C

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	453232	T-	2R2	J	-	PF
(1)	(2)	(3)	(4)	(5)	(6)	

(1)Series name

(2)Dimensions

453232	4.5×3.2×3.2mm (L×W×T)
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(3)Packaging style

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

(4)Inductance value

1R0	1 μ H
100	10 μ H
101	100 μ H
102	1000 μ H

(5)Inductance tolerance

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

PF	Lead-free compatible product
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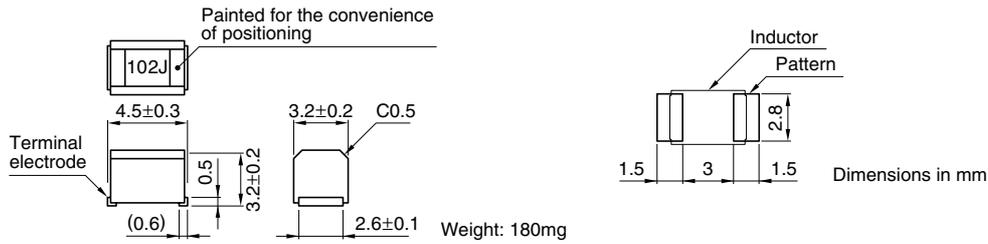
PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	500 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

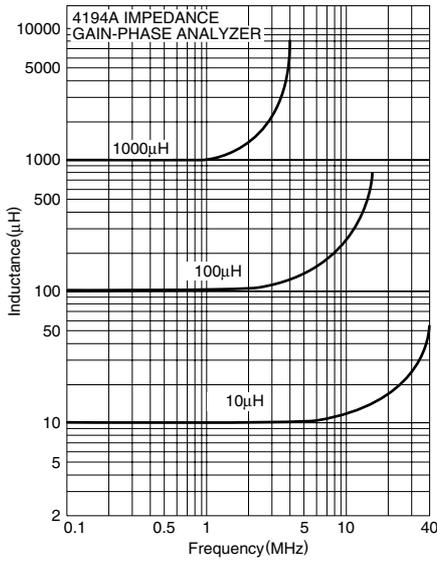
Inductance (μH)	Inductance tolerance	Q min.	Test frequency L, Q (MHz)	Self-resonant frequency (MHz)min.	DC resistance (Ω)max.	Rated current* (mA)max.	Part No.
1	±5%	50	7.96	100	0.5	450	NL453232T-1R0J-PF
1.2	±5%	50	7.96	80	0.55	430	NL453232T-1R2J-PF
1.5	±5%	50	7.96	70	0.6	410	NL453232T-1R5J-PF
1.8	±5%	50	7.96	60	0.65	390	NL453232T-1R8J-PF
2.2	±5%	50	7.96	55	0.7	380	NL453232T-2R2J-PF
2.7	±5%	50	7.96	50	0.75	370	NL453232T-2R7J-PF
3.3	±5%	50	7.96	45	0.8	355	NL453232T-3R3J-PF
3.9	±5%	50	7.96	40	0.9	330	NL453232T-3R9J-PF
4.7	±5%	50	7.96	35	1	315	NL453232T-4R7J-PF
5.6	±5%	50	7.96	33	1.1	300	NL453232T-5R6J-PF
6.8	±5%	50	7.96	27	1.2	285	NL453232T-6R8J-PF
8.2	±5%	50	7.96	25	1.4	270	NL453232T-8R2J-PF
10	±5%	50	2.52	20	1.6	250	NL453232T-100J-PF
12	±5%	50	2.52	18	2	225	NL453232T-120J-PF
15	±5%	50	2.52	17	2.5	200	NL453232T-150J-PF
18	±5%	50	2.52	15	2.8	190	NL453232T-180J-PF
22	±5%	50	2.52	13	3.2	180	NL453232T-220J-PF
27	±5%	50	2.52	12	3.6	170	NL453232T-270J-PF
33	±5%	50	2.52	11	4	160	NL453232T-330J-PF
39	±5%	50	2.52	10	4.5	150	NL453232T-390J-PF
47	±5%	50	2.52	10	5	140	NL453232T-470J-PF
56	±5%	50	2.52	9	5.5	135	NL453232T-560J-PF
68	±5%	50	2.52	9	6	130	NL453232T-680J-PF
82	±5%	50	2.52	8	7	120	NL453232T-820J-PF
100	±5%	40	0.796	8	8	110	NL453232T-101J-PF
120	±5%	40	0.796	6	8	110	NL453232T-121J-PF
150	±5%	40	0.796	5	9	105	NL453232T-151J-PF
180	±5%	40	0.796	5	9.5	102	NL453232T-181J-PF
220	±5%	40	0.796	4	10	100	NL453232T-221J-PF
270	±5%	40	0.796	4	12	92	NL453232T-271J-PF
330	±5%	40	0.796	3.5	14	85	NL453232T-331J-PF
390	±5%	40	0.796	3	16	80	NL453232T-391J-PF
470	±5%	40	0.796	3	26	62	NL453232T-471J-PF
560	±5%	30	0.796	3	30	50	NL453232T-561J-PF
680	±5%	30	0.796	3	30	50	NL453232T-681J-PF
820	±5%	30	0.796	2.5	35	30	NL453232T-821J-PF
1000	±5%	30	0.252	2.5	40	30	NL453232T-102J-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.

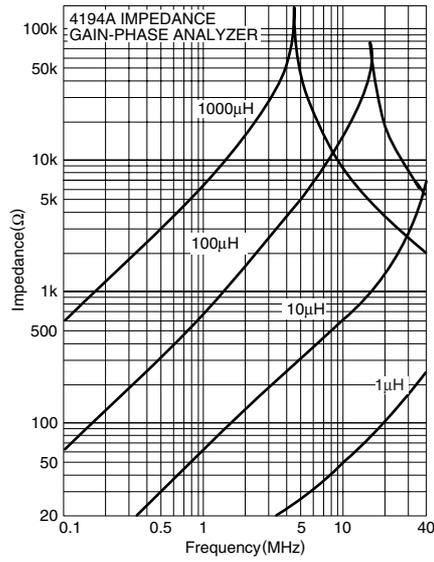
- Test equipment L, Q: YHP4194A IMPEDANCE ANALYZER (16085A+16093B+TDK TF-1)
SRF: HP8753C NETWORK ANALYZER (Z_{in}=Z_{out}=50Ω)
Rdc: MATSUSHITA VP-2941A DIGITAL MILLIOHM METER

TYPICAL ELECTRICAL CHARACTERISTICS

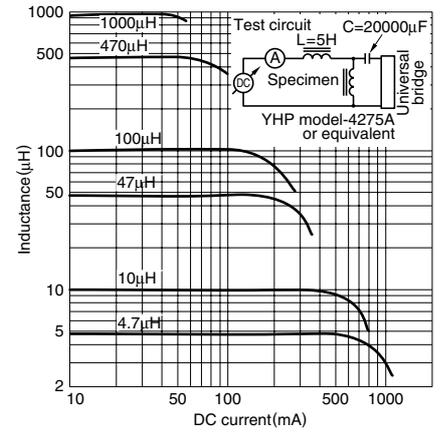
INDUCTANCE vs. FREQUENCY CHARACTERISTICS



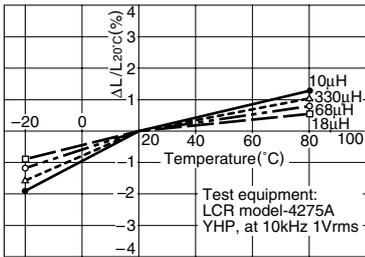
IMPEDANCE vs. FREQUENCY CHARACTERISTICS



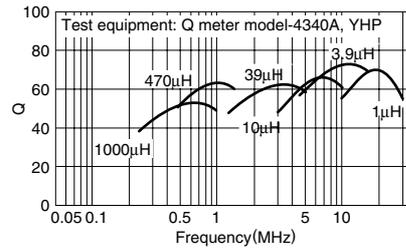
INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



INDUCTANCE CHANGE vs. TEMPERATURE CHARACTERISTICS



Q vs. FREQUENCY CHARACTERISTICS



• All specifications are subject to change without notice.

SMD Inductors(Coils) For Signal Line(Wound)

Conformity to RoHS Directive

NL Series NL565050

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

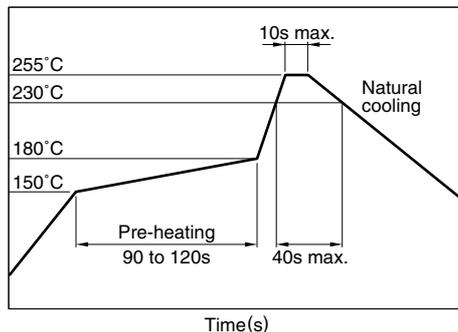
- Electronic equipment used in communication infrastructures including xDSL and mobile base stations.
- Audio-visual equipment including TVs and VCRs.
- Other electronic equipment including HDDs and ODDs.

SPECIFICATIONS

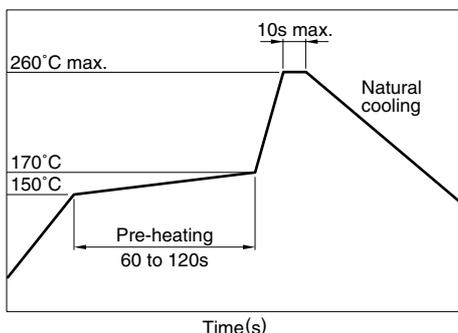
Operating temperature range	-40 to +105°C [Including self-temperature rise]
Storage temperature range	-40 to +105°C

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)
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(4)Inductance value

122	1.2mH
103	10mH

(5)Inductance tolerance

J	±5%
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(6) Lead-free compatible product

PF	Lead-free compatible product
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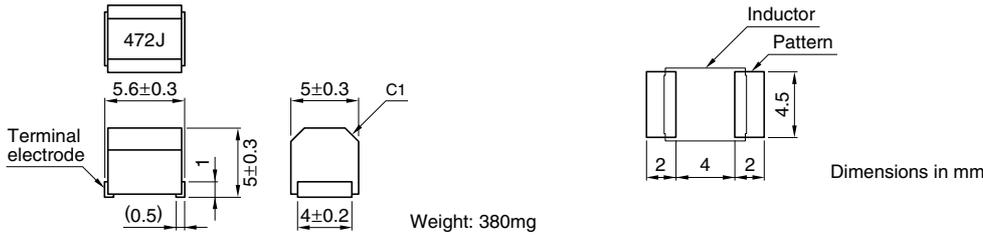
PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	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

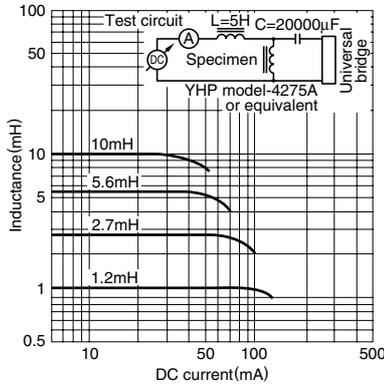
Inductance (mH)	Inductance tolerance	Q min.	Test frequency L, Q (MHz)	Self-resonant frequency (MHz)min.	DC resistance (Ω)max.	Rated current* (mA)max.	Part No.
1.2	±5%	30	0.252	1.5	17	75	NL565050T-122J-PF
1.5	±5%	30	0.252	1.4	20	70	NL565050T-152J-PF
1.8	±5%	30	0.252	1.3	30	60	NL565050T-182J-PF
2.2	±5%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

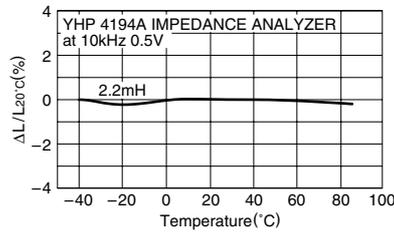
- Test equipment L, Q: YHP4194A IMPEDANCE ANALYZER (16085A+16093B+TDK TF-1)
 SRF: HP8753C NETWORK ANALYZER (Zin=Zout=50Ω)
 Rdc: MATSUSHITA VP-2941A DIGITAL MILLIOHM METER

TYPICAL ELECTRICAL CHARACTERISTICS

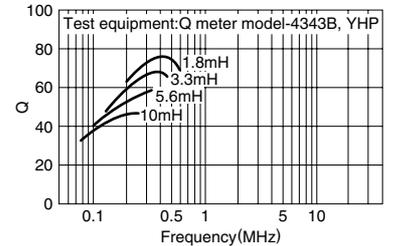
INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



INDUCTANCE CHANGE vs. TEMPERATURE CHARACTERISTICS



Q vs. FREQUENCY CHARACTERISTICS



• All specifications are subject to change without notice.

SMD Inductors(Coils) For Signal Line(Wound)

Conformity to RoHS Directive

NLHV Series NLHV25

FEATURES

- High Q-factor is provided in frequency band more than 30MHz in comparison with existing NLV25 series.
- Land pattern is compatible with an existing series product.
- Lead-free material is used for the plating on the terminal

APPLICATIONS

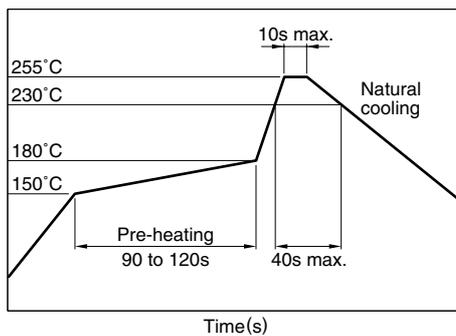
Power supply lines, audio visual systems, IT equipment

SPECIFICATIONS

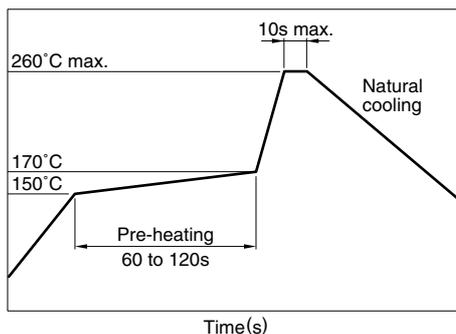
Operating temperature range	-40 to +105°C [Including self-temperature rise]
Storage temperature range	-40 to +105°C

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

NLHV	25	T	R12	J	PF
(1)	(2)	(3)	(4)	(5)	(6)

(1) Series name

(2) Dimensions

25	2.5×2.0×1.8mm(L×W×T)
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(3) Packaging style

T	Taping (reel)
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(4) Inductance

R12	0.12μH
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(5) Inductance tolerance

J	±5%
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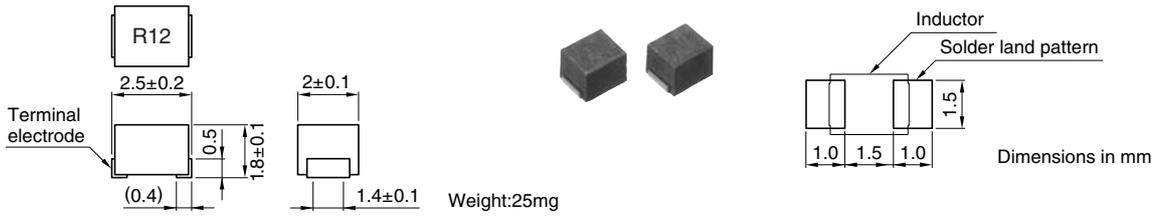
(6) Lead-free compatible product

PF	Conformity to RoHS directive, exemption regulations apply
EF	Conformity to RoHS directive

• 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



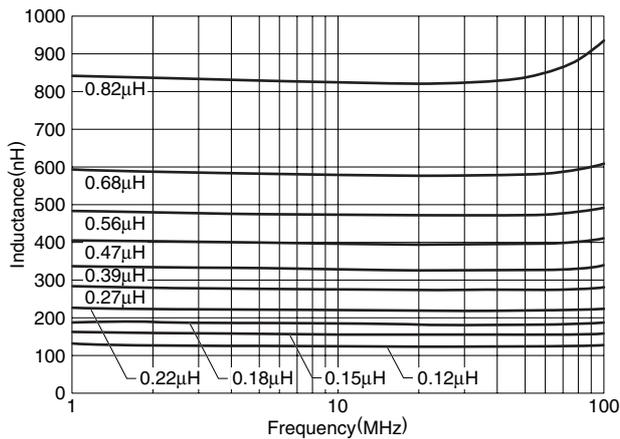
ELECTRICAL CHARACTERISTICS

Inductance (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.
0.12	±5%	30	25.2	700	0.38	550	NLHV25T-R12J-□*
0.15	±5%	30	25.2	550	0.42	500	NLHV25T-R15J-□
0.18	±5%	35	25.2	500	0.45	475	NLHV25T-R18J-□
0.22	±5%	35	25.2	450	0.5	450	NLHV25T-R22J-□
0.27	±5%	35	25.2	425	0.58	425	NLHV25T-R27J-□
0.33	±5%	40	25.2	400	0.68	400	NLHV25T-R33J-□
0.39	±5%	40	25.2	375	0.73	375	NLHV25T-R39J-□
0.47	±5%	40	25.2	350	0.83	350	NLHV25T-R47J-□
0.56	±5%	40	25.2	325	0.93	325	NLHV25T-R56J-□
0.68	±5%	40	25.2	180	0.98	300	NLHV25T-R68J-□
0.82	±5%	40	25.2	120	1.05	280	NLHV25T-R82J-□

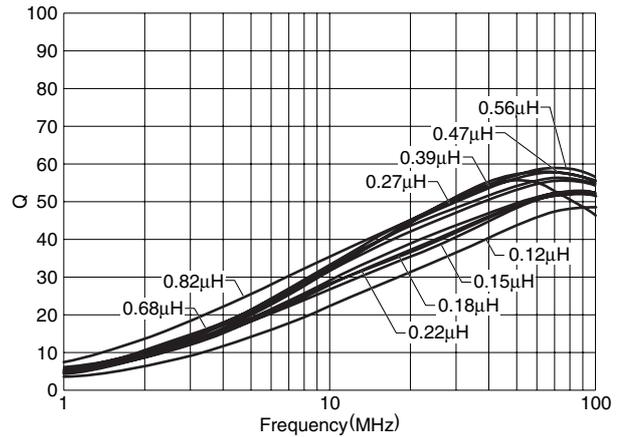
* □: Please specify lead-free compatible product, PF (Conformity to RoHS directive, exemption regulations apply) or EF (Conformity to RoHS directive)

TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE vs. FREQUENCY CHARACTERISTICS



Q vs. FREQUENCY CHARACTERISTICS



• All specifications are subject to change without notice.

SMD Inductors(Coils) For Power Line(Wound, Magnetic Shielded)

Conformity to RoHS Directive

NLFV Series NLFV25

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.
- From 1 μ H to 100 μ H, all of the products are available in the E-6 series.
- This product is in compliance with the RoHS Directive. Other products with specifications that do not include exemption regulations are also available.

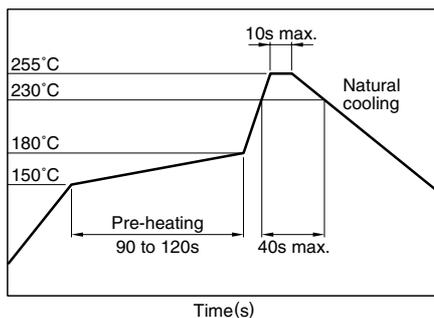
APPLICATIONS

- Audio-visual equipment including TVs, VCRs and digital cameras.
- Electronic equipment used in communication infrastructures including xDSL and mobile base stations.
- Electronic equipment used in onboard automobile equipment including car audio and ECU systems.
- Other electronic equipment including HDDs and ODDs.

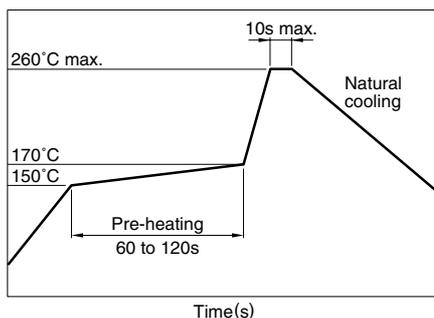
SPECIFICATIONS

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



- 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.

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

NLFV	25	T	2R2	M	-PF
(1)	(2)	(3)	(4)	(5)	(6)

(1) Series name

(2) Dimensions

25 2.5×2.0×1.8mm (L×W×T)

(3) Packaging style

T Taping (reel)

(4) Inductance value

1R0	1 μ H
100	10 μ H
101	100 μ H

(5) Inductance tolerance

K	±10%
M	±20%

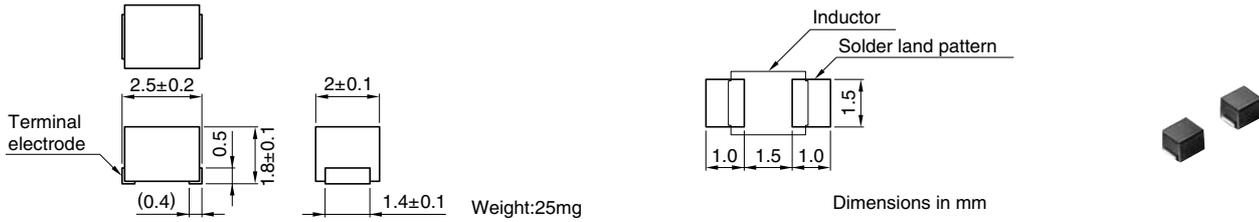
(6) Lead-free compatible product

PF	Conformity to RoHS directive, exemption regulations apply
EF	Conformity to RoHS directive

PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	2000 pieces/reel

SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



ELECTRICAL CHARACTERISTICS

Inductance (μH)	Inductance tolerance	Q ref.	Test frequency L,Q (MHz)	Self-resonant frequency (MHz)min.	DC resistance (Ω)±20%	Rated current*1 (mA)max.	Part No.
1	±20%	5	7.96	100	0.07	455	NLFV25T-1R0M-□ ^{*2}
1.5	±20%	5	7.96	80	0.09	350	NLFV25T-1R5M-□
2.2	±20%	5	7.96	70	0.1	315	NLFV25T-2R2M-□
3.3	±20%	5	7.96	55	0.2	280	NLFV25T-3R3M-□
4.7	±20%	5	7.96	45	0.24	210	NLFV25T-4R7M-□
6.8	±20%	5	7.96	38	0.29	175	NLFV25T-6R8M-□
10	±10%	10	2.52	32	0.36	155	NLFV25T-100K-□
15	±10%	10	2.52	28	0.75	130	NLFV25T-150K-□
22	±10%	10	2.52	16	1	105	NLFV25T-220K-□
33	±10%	10	2.52	14	1.4	85	NLFV25T-330K-□
47	±10%	10	2.52	11	1.7	60	NLFV25T-470K-□
68	±10%	10	2.52	10	3.3	50	NLFV25T-680K-□
100	±10%	10	0.796	8	4	40	NLFV25T-101K-□

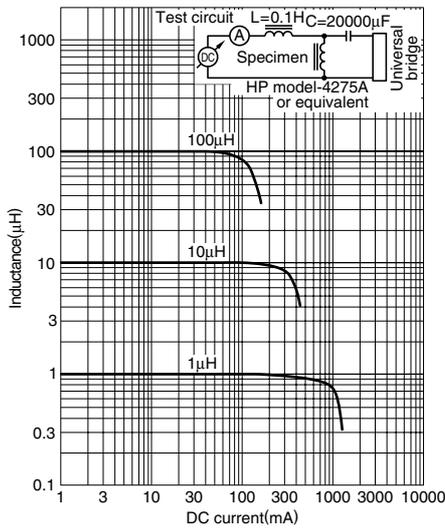
*1 Rated current: Value obtained when current flows and the temperature has risen to 20°C or when DC current flows and the initial value of inductance has fallen by 10%, whichever is smaller.

*2 □: Please specify lead-free compatible product, PF (Conformity to RoHS directive, exemption regulations apply) or EF (Conformity to RoHS directive)

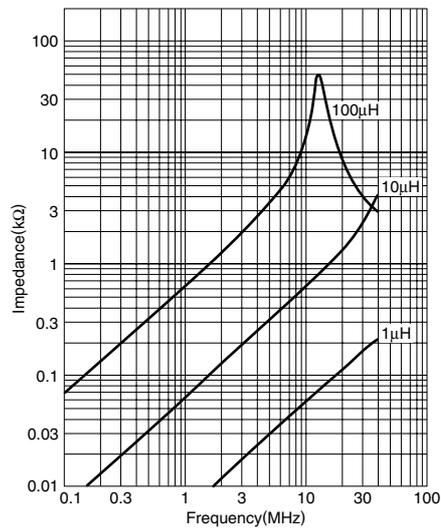
- Test equipment L, Q: HP4194A IMPEDANCE ANALYZER(16085A+16093B+TDK TF-1)
 SRF: HP8753C NETWORK ANALYZER
 Rdc: MATSUSHITA VP-2941A DIGITAL MILLIOHM METER

TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



IMPEDANCE vs. FREQUENCY CHARACTERISTICS



• All specifications are subject to change without notice.

SMD Inductors(Coils) For Power Line(Wound, Magnetic Shielded)

Conformity to RoHS Directive

NLFV Series NLFV32

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.
- From 1 μ H to 1000 μ H, all of the products are available in the E-6 series.
- This product is in compliance with the RoHS Directive. Other products with specifications that do not include exemption regulations are also available.

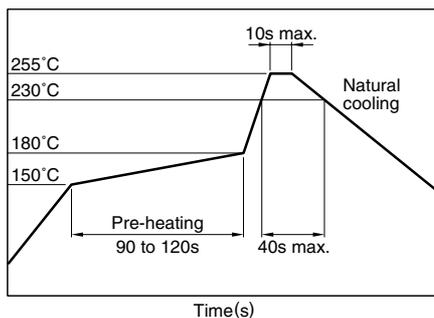
APPLICATIONS

- Audio-visual equipment including TVs, VCRs and digital cameras.
- Electronic equipment used in communication infrastructures including xDSL and mobile base stations.
- Electronic equipment used in onboard automobile equipment including car audio and car navigation systems.
- Other electronic equipment including HDDs and ODDs.

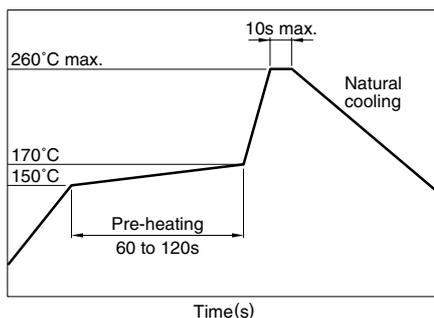
SPECIFICATIONS

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

NLFV	32	T	2R2	M	-EF
(1)	(2)	(3)	(4)	(5)	(6)

(1) Series name

(2) Dimensions

32 3.2×2.5×2.2mm (L×W×T)

(3) Packaging style

T Taping (reel)

(4) Inductance value

1R0	1 μ H
100	10 μ H
101	100 μ H

(5) Inductance tolerance

K	±10%
M	±20%

(6) Lead-free compatible product

EF Conformity to RoHS directive

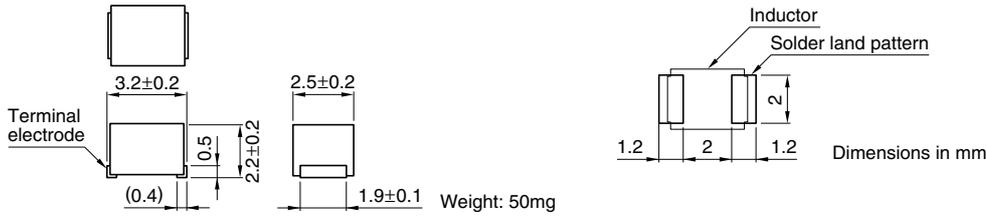
PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	2000 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



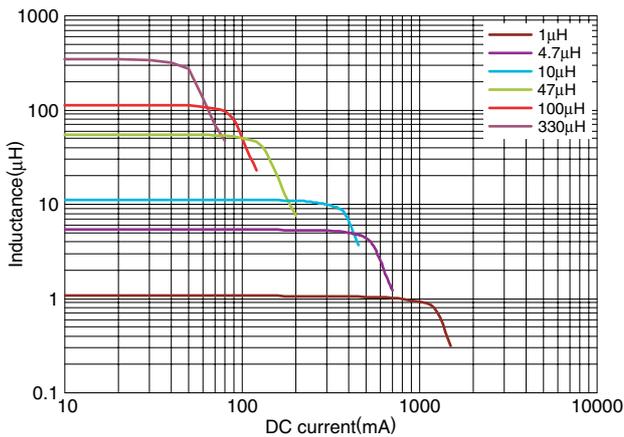
ELECTRICAL CHARACTERISTICS

Inductance (μH)	Inductance tolerance	Q ref.	Test frequency L,Q (MHz)	Self-resonant frequency (MHz)min.	DC resistance (Ω)±20%	Rated current* (mA)max.	Part No.
1	±20%	5	7.96	100	0.06	750	NLFV32T-1R0M-EF
1.5	±20%	5	7.96	80	0.07	600	NLFV32T-1R5M-EF
2.2	±20%	5	7.96	68	0.09	500	NLFV32T-2R2M-EF
3.3	±20%	5	7.96	54	0.11	420	NLFV32T-3R3M-EF
4.7	±20%	5	7.96	46	0.13	360	NLFV32T-4R7M-EF
6.8	±20%	5	7.96	38	0.17	260	NLFV32T-6R8M-EF
10	±10%	10	2.52	30	0.20	250	NLFV32T-100K-EF
15	±10%	10	2.52	26	0.30	140	NLFV32T-150K-EF
22	±10%	10	2.52	21	0.40	120	NLFV32T-220K-EF
33	±10%	10	2.52	17	0.65	95	NLFV32T-330K-EF
47	±10%	10	2.52	14	0.85	90	NLFV32T-470K-EF
68	±10%	10	2.52	12	1.3	70	NLFV32T-680K-EF
100	±10%	25	0.796	10	2.2	55	NLFV32T-101K-EF
150	±10%	25	0.796	8	2.9	50	NLFV32T-151K-EF
220	±10%	25	0.796	7	5.1	40	NLFV32T-221K-EF
330	±10%	25	0.796	5	6.8	35	NLFV32T-331K-EF
470	±10%	25	0.796	4	14.5	30	NLFV32T-471K-EF
680	±10%	25	0.796	3	18.5	25	NLFV32T-681K-EF
1000	±10%	25	0.252	2.4	22.5	20	NLFV32T-102K-EF

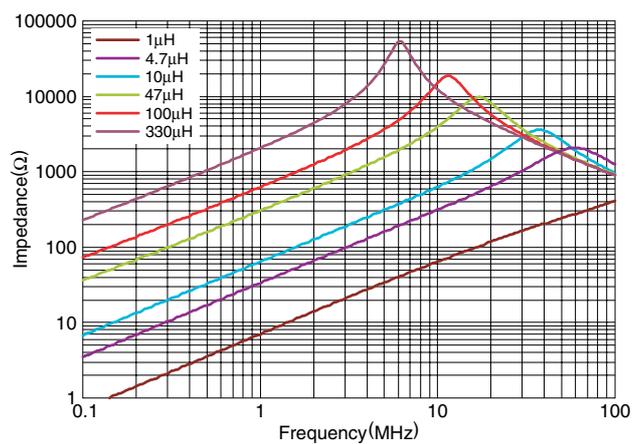
- * Rated current: Value obtained when current flows and the temperature has risen to 20°C or when DC current flows and the initial value of inductance has fallen by 10%, whichever is smaller.
- Test equipment L, Q: HP4194A IMPEDANCE ANALYZER(16085A+16093B+TDK TF-1) or equivalent
 SRF: HP8753C NETWORK ANALYZER or equivalent
 Rdc: MATSUSHITA VP-2941A DIGITAL MILLIOHM METER or equivalent

TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



IMPEDANCE vs. FREQUENCY CHARACTERISTICS



• All specifications are subject to change without notice.

SMD Inductors(Coils) For Power Line(Wound, Magnetic Shielded)

Conformity to RoHS Directive

NLFC Series NLFC453232

FEATURES

- The NLFC series features magnetic shielding and is recommended for power supply line applications.
- 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.
- From 1 μ H to 330 μ H, all of the products are available in the E-6 series.
- It is a product conforming to RoHS directive.

APPLICATIONS

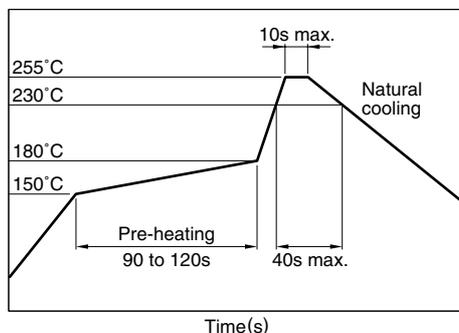
- Electronic equipment used in communication infrastructures including xDSL and mobile base stations.
- Audio-visual equipment including TVs and VCRs.
- Other electronic equipment including HDDs and ODDs.

SPECIFICATIONS

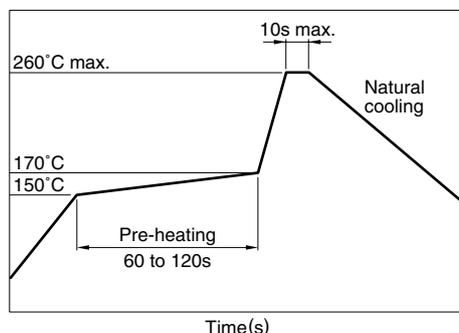
Operating temperature range	-40 to +105°C [Including self-temperature rise]
Storage temperature range	-40 to +105°C

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

NLFC	453232	T-	2R2	M	-	PF
(1)	(2)	(3)	(4)	(5)	(6)	

(1)Series name

(2)Dimensions

453232 4.5×3.2×3.2mm (L×W×T)

(3)Packaging style

T Taping (reel)

(4)Inductance value

1R0	1 μ H
100	10 μ H
101	100 μ H

(5)Inductance tolerance

K	±10%
M	±20%

(6) Lead-free compatible product

PF Lead-free compatible product

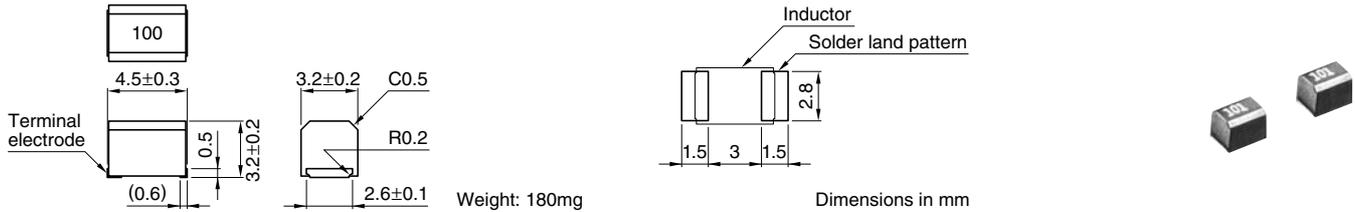
PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	500 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

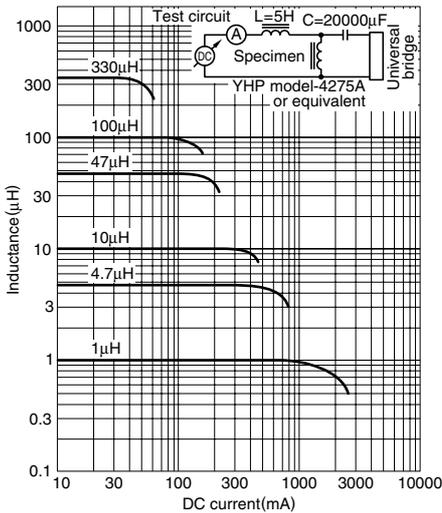
Inductance (μH)	Inductance tolerance	Q ref.	Test frequency L, Q (MHz)	Self-resonant frequency (MHz)min.	DC resistance (Ω)±30%	Rated current* (mA)max.	Part No.
1	±20%	10	7.96	200	0.05	800	NLFC453232T-1R0M-PF
1.5	±20%	10	7.96	130	0.06	700	NLFC453232T-1R5M-PF
2.2	±20%	10	7.96	80	0.07	600	NLFC453232T-2R2M-PF
3.3	±20%	10	7.96	45	0.09	460	NLFC453232T-3R3M-PF
4.7	±20%	10	7.96	35	0.1	400	NLFC453232T-4R7M-PF
6.8	±20%	10	7.96	28	0.14	300	NLFC453232T-6R8M-PF
10	±10%	10	2.52	22	0.21	250	NLFC453232T-100K-PF
15	±10%	10	2.52	20	0.3	200	NLFC453232T-150K-PF
22	±10%	10	2.52	18	0.46	170	NLFC453232T-220K-PF
33	±10%	10	2.52	14	0.63	140	NLFC453232T-330K-PF
47	±10%	10	2.52	11.5	0.85	120	NLFC453232T-470K-PF
68	±10%	10	2.52	10	1.2	100	NLFC453232T-680K-PF
100	±10%	10	0.796	8	1.7	90	NLFC453232T-101K-PF
150	±10%	10	0.796	7	2.3	65	NLFC453232T-151K-PF
220	±10%	10	0.796	5.5	3.8	55	NLFC453232T-221K-PF
330	±10%	10	0.796	4	6	45	NLFC453232T-331K-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.

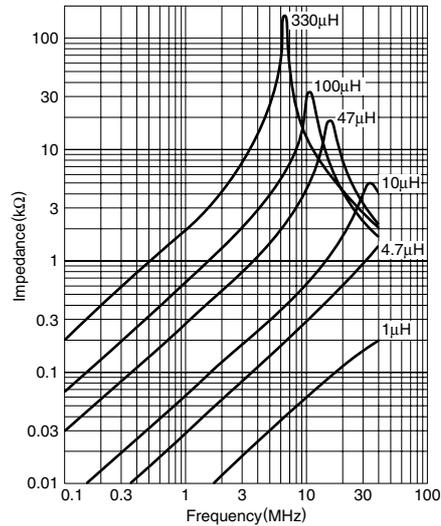
- Test equipment L, Q: YHP4194A IMPEDANCE ANALYZER+YHP16085A+YHP16093B+TF-1, or equivalent
 SRF: HP8753C NETWORK ANALYZER (Z_{in}=Z_{out}=50Ω), or equivalent
 Rdc: MATSUSHITA VP-2941A DIGITAL MILLIOHM METER, or equivalent

TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



IMPEDANCE vs. FREQUENCY CHARACTERISTICS



• All specifications are subject to change without notice.

SMD Inductors(Coils) For Power Line(Wound)

Conformity to RoHS Directive

NLCV Series NLCV25

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 electrical characteristics, reliability, shape and pad shape are the same as the previous NL series.
- The product uses metal terminals, which realize excellent connection reliability.
- Highly heat resistant thermoplastic resin is used to form the exterior package.
- From 1 μ H to 33 μ H, all of the products are available in the E-6 series.
- This product is in compliance with the RoHS Directive. Other products with specifications that do not include exemption regulations are also available.

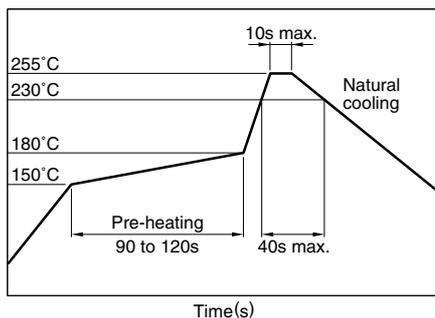
APPLICATIONS

- Audio-visual equipment including TVs, VCRs and digital cameras.
- Electronic equipment used in communication infrastructures including xDSL and mobile base stations.
- Electronic equipment used in onboard automobile equipment including car audio and ECU systems.
- Other electronic equipment including HDDs and ODDs.

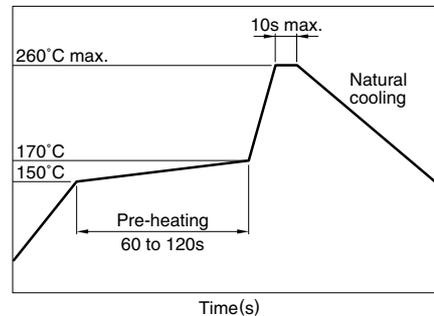
SPECIFICATIONS

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: approx.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

NLCV	25	T	2R2	M	- PF
(1)	(2)	(3)	(4)	(5)	(6)

(1) Series name

(2) Dimensions

25	2.5×2.0×1.8mm (L×W×T)
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(3) Packaging style

T	Taping (reel)
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(4) Inductance value

1R0	1 μ H
220	22 μ H

(5) Inductance tolerance

K	±10%
M	±20%

(6) Lead-free compatible product

PF	Conformity to RoHS directive, exemption regulations apply
EF	Conformity to RoHS directive

PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	2000 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(μH)	Inductance tolerance	Q ref.	Test frequency L,Q (MHz)	Self-resonant frequency (MHz)min.	DC resistance (Ω)±30%	Rated current*1 (mA)max.	Part No.
1	±20%	20	7.96	200	0.34	475	NLCV25T-1R0M-□*2
1.5	±20%	20	7.96	165	0.42	435	NLCV25T-1R5M-□
2.2	±20%	20	7.96	95	0.5	390	NLCV25T-2R2M-□
3.3	±20%	20	7.96	55	0.65	340	NLCV25T-3R3M-□
4.7	±20%	20	7.96	43	0.8	285	NLCV25T-4R7M-□
6.8	±20%	20	7.96	39	1	275	NLCV25T-6R8M-□
10	±10%	30	2.52	32	1.69	210	NLCV25T-100K-□
15	±10%	30	2.52	21	2.2	175	NLCV25T-150K-□
22	±10%	30	2.52	18	2.8	160	NLCV25T-220K-□
33	±10%	30	2.52	16	4.2	120	NLCV25T-330K-□

*1 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.

*2 □: Please specify lead-free compatible product, PF (Conformity to RoHS directive, exemption regulations apply) or EF (Conformity to RoHS directive)

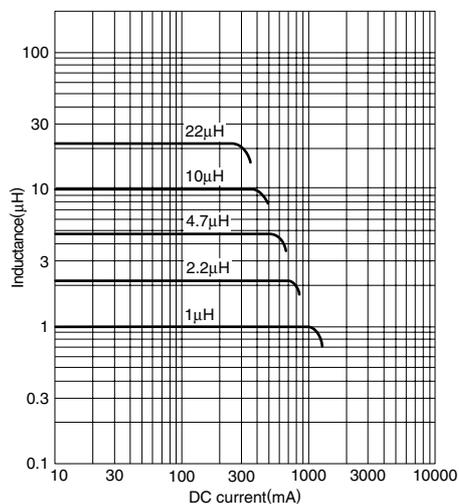
• Test equipment L, Q: HP4194A IMPEDANCE/GAIN PHASE ANALYZER+HP16085A+HP16093 B+TF-1

SRF: HP8753C NETWORK ANALYZER

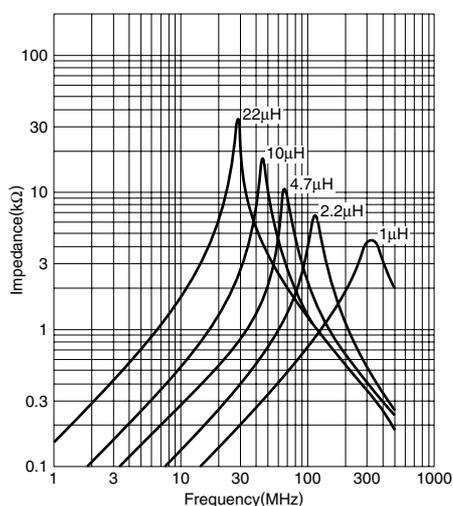
Rdc: MATSUSHITA VP-2941A DIGITAL MILLIOHM METER

TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



IMPEDANCE vs. FREQUENCY CHARACTERISTICS



SMD Inductors(Coils) For Power Line(Wound)

Conformity to RoHS Directive

NLCV Series NLCV32

FEATURES

- This is a renewed version of NLC322522.
- 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 electrical characteristics, reliability, shape and pad shape are the same as the previous NL series.
- The product uses metal terminals, which realize excellent connection reliability.
- Highly heat resistant thermoplastic resin is used to form the exterior package.
- From 1.0 μ H to 330 μ H, all of the products are available.
- This product is in compliance with the RoHS Directive. Other products with specifications that do not include exemption regulations are also available.

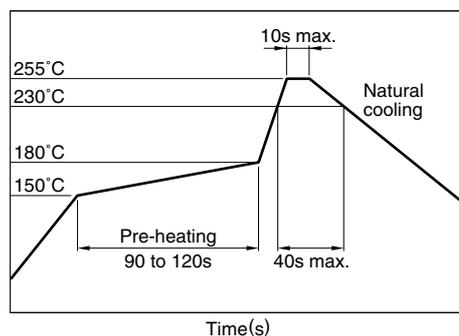
APPLICATIONS

- Audio-visual equipment including TVs, VCRs and digital cameras.
- Electronic equipment used in communication infrastructures including xDSL and mobile base stations.
- Electronic equipment used in onboard automobile equipment including car audio and ECU systems.
- Other electronic equipment including HDDs and ODDs.

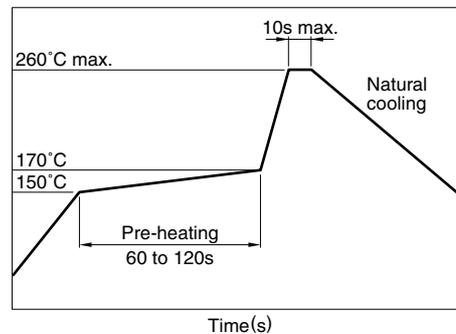
SPECIFICATIONS

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: approx.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

NLCV	32	T-	2R2	M	-	PF
(1)	(2)	(3)	(4)	(5)	(6)	

(1) Series name

(2) Dimensions

32	3.2×2.5×2.2mm (L×W×T)
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(3) Packaging style

T	Taping (reel)
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(4) Inductance value

1R0	1 μ H
100	10 μ H
101	100 μ H

(5) Inductance tolerance

K	±10%
M	±20%

(6) Lead-free compatible product

PF	Conformity to RoHS directive, exemption regulations apply
EF	Conformity to RoHS directive

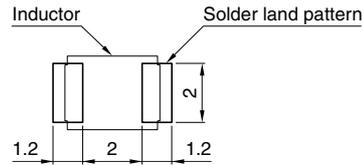
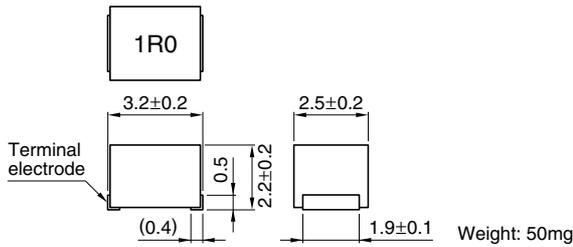
PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	2000 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



Dimensions in mm

ELECTRICAL CHARACTERISTICS

Inductance (μH)	Inductance tolerance	Q typ.	Test frequency L,Q (MHz)	Self-resonant frequency (MHz)min.	DC resistance (Ω)±30%	Rated current*1 (mA)max.	Part No.
1	±20%	10	7.96	100	0.06	1000	NLCV32T-1R0M-□*2
1.5	±20%	10	7.96	80	0.11	830	NLCV32T-1R5M-□
2.2	±20%	10	7.96	68	0.13	770	NLCV32T-2R2M-□
3.3	±20%	10	7.96	54	0.16	690	NLCV32T-3R3M-□
4.7	±20%	15	7.96	46	0.2	620	NLCV32T-4R7M-□
6.8	±20%	15	7.96	38	0.27	530	NLCV32T-6R8M-□
10	±10%	15	2.52	30	0.36	450	NLCV32T-100K-□
15	±10%	15	2.52	26	0.56	370	NLCV32T-150K-□
22	±10%	15	2.52	21	0.77	300	NLCV32T-220K-□
33	±10%	15	2.52	17	1.1	240	NLCV32T-330K-□
47	±10%	15	2.52	14	1.64	180	NLCV32T-470K-□
68	±10%	15	2.52	12	2.8	140	NLCV32T-680K-□
100	±10%	15	0.796	10	3.7	120	NLCV32T-101K-□
150	±10%	20	0.796	8	6.1	100	NLCV32T-151K-□
220	±10%	20	0.796	7	8.4	80	NLCV32T-221K-□
330	±10%	20	0.796	6	12.3	70	NLCV32T-331K-□

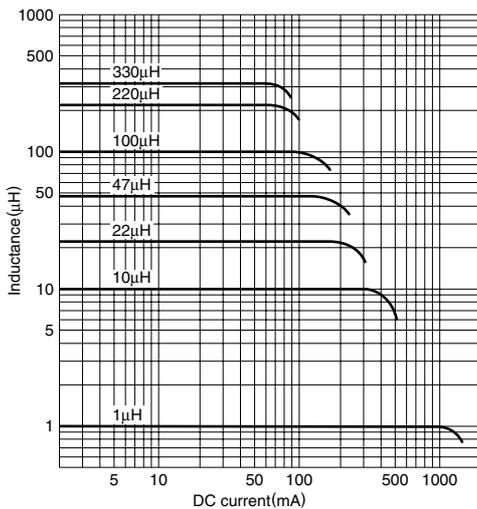
*1 Rated current: Value obtained when current flows and the temperature has risen to 20°C or when DC current flows and the initial value of inductance has fallen by 10%, whichever is smaller.

*2 □: Please specify lead-free compatible product, PF (Conformity to RoHS directive, exemption regulations apply) or EF (Conformity to RoHS directive)

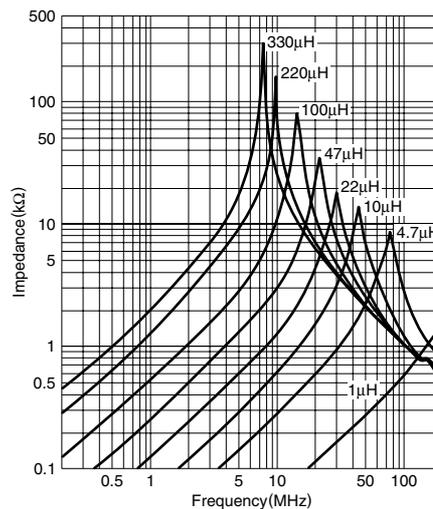
- Test equipment L, Q: YHP4194A IMPEDANCE ANALYZER+YHP16085A+YHP16093B+TF-1, or equivalent
 SRF: HP8753C NETWORK ANALYZER
 Rdc: MATSUSHITA VP-2941A DIGITAL MILLIOHM METER, or equivalent

TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



IMPEDANCE vs. FREQUENCY CHARACTERISTICS



• All specifications are subject to change without notice.

SMD Inductors(Coils) For Power Line(Wound)

Conformity to RoHS Directive

NLCV Series NLCV25T-R

FEATURES

- Rated current is maintained in the range of 1.7 to 2.0 times compared to the existing NLCV25 series.
- Stable inductance, as the inductance change in the maximum rated current load is within -10% .
- Maximum operating temperature is $+125^{\circ}\text{C}$ (including self-temperature rise).
- Lead-free material is adopted for terminal soldering.
- PC board pattern is compatible with the existing NLCV25 series.
- This product is in compliance with the RoHS Directive. Other products with specifications that do not include exemption regulations are also available.

APPLICATIONS

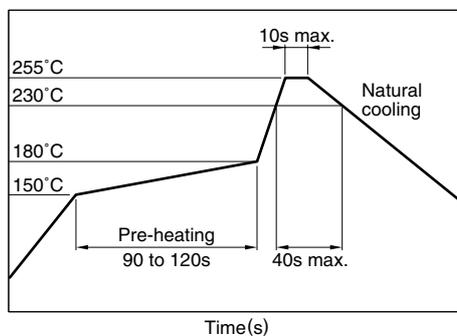
Power supply lines, audio visual systems, electronic equipment for vehicle, IT equipment

SPECIFICATIONS

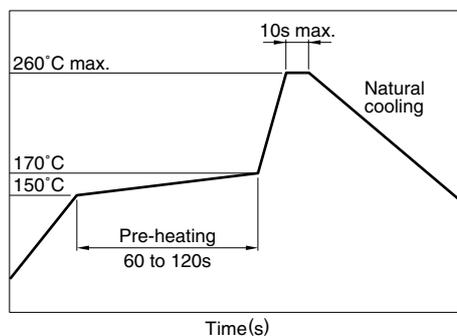
Operating temperature range	-40 to $+125^{\circ}\text{C}$ [Including self-temperature rise]
Storage temperature range	-40 to $+125^{\circ}\text{C}$

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

NLCV	25	T	R10	M	PF	R
(1)	(2)	(3)	(4)	(5)	(6)	(7)

(1) Series name

(2) Dimensions

25	$2.5 \times 2.0 \times 1.8\text{mm}$ (L×W×T)
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(3) Packaging style

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

(4) Inductance

R10	$0.1\mu\text{H}$
1R0	$1\mu\text{H}$
100	$10\mu\text{H}$

(5) Inductance tolerance

K	$\pm 10\%$
M	$\pm 20\%$

(6) Lead-free compatible product

PF	Conformity to RoHS directive, exemption regulations apply
EF	Conformity to RoHS directive

(7) TDK internal code

• 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 (μH)	Inductance tolerance	Q ref.	Test frequency L,Q (MHz)	Self-resonant frequency (MHz)min.	DC resistance (Ω)±20%	Rated current (mA)max.	Part No.
0.1	±20%	5	25.2	800	0.04	1890	NLCV25T-R10M-□*R
0.15	±20%	5	25.2	500	0.044	1800	NLCV25T-R15M-□R
0.22	±20%	5	25.2	400	0.05	1690	NLCV25T-R22M-□R
0.33	±20%	5	25.2	300	0.065	1480	NLCV25T-R33M-□R
0.47	±20%	5	25.2	220	0.08	1340	NLCV25T-R47M-□R
0.68	±20%	5	25.2	160	0.09	1260	NLCV25T-R68M-□R
1	±20%	10	7.96	100	0.14	1000	NLCV25T-1R0M-□R
1.5	±20%	10	7.96	80	0.18	890	NLCV25T-1R5M-□R
2.2	±20%	10	7.96	68	0.27	730	NLCV25T-2R2M-□R
3.3	±20%	10	7.96	54	0.44	570	NLCV25T-3R3M-□R
4.7	±20%	10	7.96	46	0.57	500	NLCV25T-4R7M-□R
6.8	±20%	10	7.96	38	0.92	390	NLCV25T-6R8M-□R
10	±10%	15	2.52	30	1.1	360	NLCV25T-100K-□R

* □: Please specify lead-free compatible product, PF (Conformity to RoHS directive, exemption regulations apply) or EF (Conformity to RoHS directive)

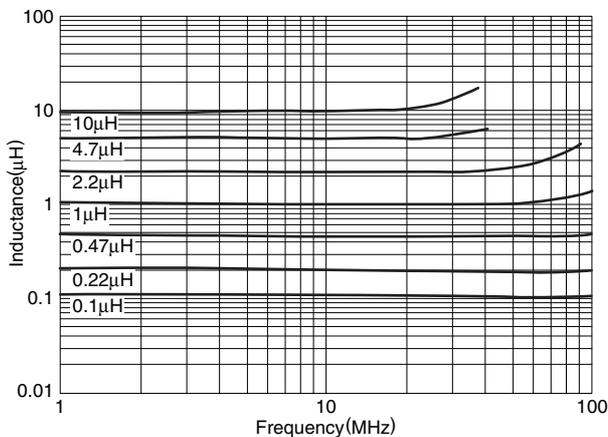
• Test equipment L, Q: HP4194A IMPEDANCE ANALYZER+16085A+16093B+TF-1

SRF: HP8753C NETWORK ANALYZER

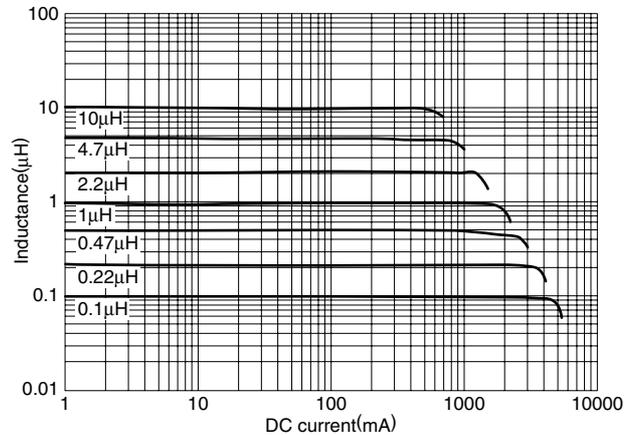
Rdc: MATSUSHITA VP-2941A DIGITAL MILLIOHM METER

TYPICAL ELECTRICAL CHARACTERISTICS

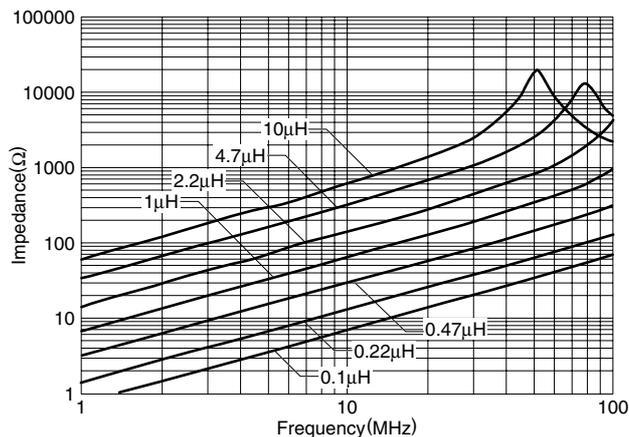
INDUCTANCE vs. FREQUENCY CHARACTERISTICS



INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS



IMPEDANCE vs. FREQUENCY CHARACTERISTICS



• All specifications are subject to change without notice.

SMD Inductors(Coils) For Power Line(Wound)

Conformity to RoHS Directive

NLCV Series NLCV32T-R

FEATURES

- Rated current is maintained in the range of 1.4 to 2.0 times compared to the existing NLCV32 series.
- Stable inductance, as the inductance change in the maximum rated current load is within -10% .
- Maximum operating temperature is $+125^{\circ}\text{C}$ (including self-temperature rise).
- Lead-free material is adopted for terminal soldering.
- PC board pattern is compatible with the existing NLCV32 series.
- This product is in compliance with the RoHS Directive. Other products with specifications that do not include exemption regulations are also available.

APPLICATIONS

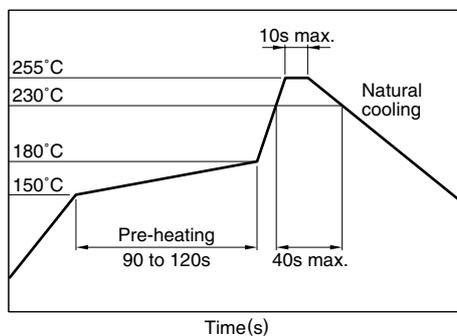
Power supply lines, audio visual systems, electronic equipment for vehicle, IT equipment

SPECIFICATIONS

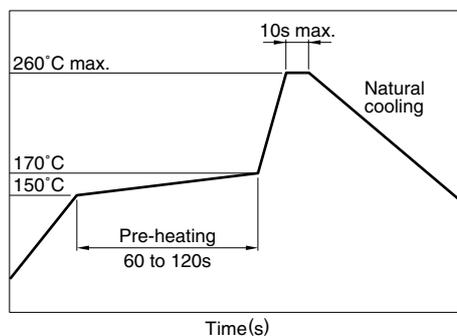
Operating temperature range	-40 to $+125^{\circ}\text{C}$ [Including self-temperature rise]
Storage temperature range	-40 to $+125^{\circ}\text{C}$

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

NLCV	32	T	R10	M	PF	R
(1)	(2)	(3)	(4)	(5)	(6)	(7)

(1) Series name

(2) Dimensions

32	$3.2 \times 2.5 \times 2.2\text{mm}$ (L×W×T)
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(3) Packaging style

T	Taping (reel)
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(4) Inductance

R10	$0.1\mu\text{H}$
1R0	$1\mu\text{H}$
100	$10\mu\text{H}$

(5) Inductance tolerance

K	$\pm 10\%$
M	$\pm 20\%$

(6) Lead-free compatible product

PF	Conformity to RoHS directive, exemption regulations apply
EF	Conformity to RoHS directive

(7) TDK internal code

• 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



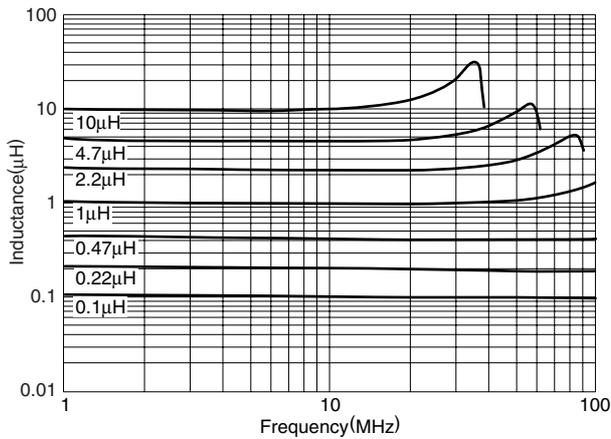
ELECTRICAL CHARACTERISTICS

Inductance (μH)	Inductance tolerance	Q ref.	Test frequency L,Q (MHz)	Self-resonant frequency (MHz)min.	DC resistance (Ω)±20%	Rated current (mA)max.	Part No.
0.1	±20%	10	25.2	800	0.02	2850	NLCV32T-R10M-□*R
0.15	±20%	10	25.2	500	0.024	2600	NLCV32T-R15M-□R
0.22	±20%	10	25.2	400	0.027	2400	NLCV32T-R22M-□R
0.33	±20%	10	25.2	300	0.035	2100	NLCV32T-R33M-□R
0.47	±20%	10	25.2	250	0.038	2000	NLCV32T-R47M-□R
0.68	±20%	10	25.2	180	0.045	1900	NLCV32T-R68M-□R
1	±20%	15	7.96	100	0.055	1700	NLCV32T-1R0M-□R
1.5	±20%	15	7.96	80	0.095	1400	NLCV32T-1R5M-□R
2.2	±20%	15	7.96	68	0.115	1200	NLCV32T-2R2M-□R
3.3	±20%	15	7.96	54	0.16	1000	NLCV32T-3R3M-□R
4.7	±20%	15	7.96	46	0.2	900	NLCV32T-4R7M-□R
6.8	±20%	15	7.96	38	0.29	700	NLCV32T-6R8M-□R
10	±10%	20	2.52	30	0.42	600	NLCV32T-100K-□R

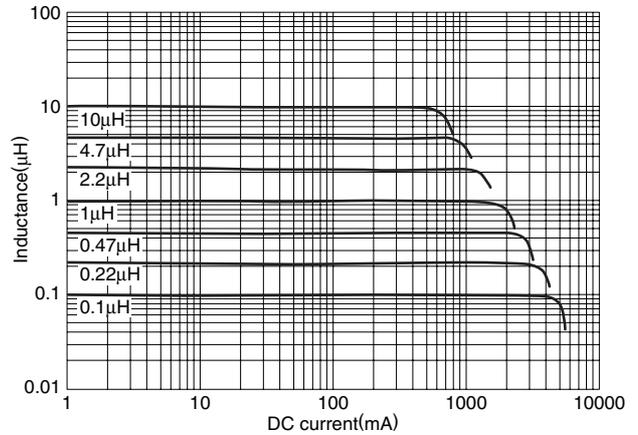
* □: Please specify lead-free compatible product, PF (Conformity to RoHS directive, exemption regulations apply) or EF (Conformity to RoHS directive)

TYPICAL ELECTRICAL CHARACTERISTICS

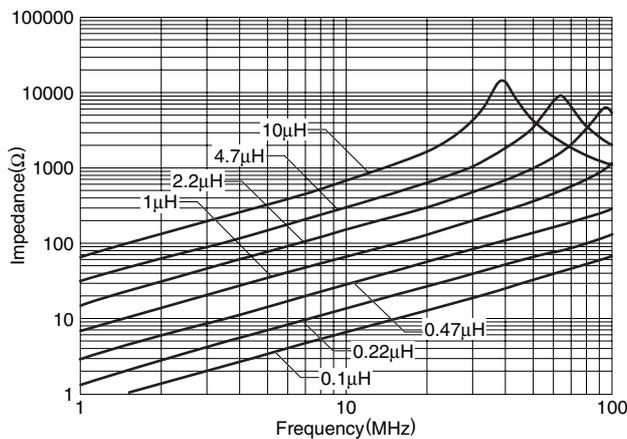
INDUCTANCE vs. FREQUENCY CHARACTERISTICS



INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS



IMPEDANCE vs. FREQUENCY CHARACTERISTICS



• All specifications are subject to change without notice.

SMD Inductors(Coils) For Power Line(Wound)

Conformity to RoHS Directive

NLC Series NLC453232

FEATURES

- The NLC series feature low DC resistance and high current handling capacities, making them ideal for power supply line applications.
- 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.
- From 1 μ H to 330 μ H, all of the products in the E-12 series are K(\pm 10%) tolerance products.
- It is a product conforming to RoHS directive.

APPLICATIONS

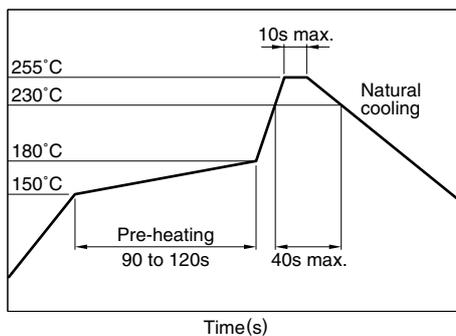
- Electronic equipment used in communication infrastructures including xDSL and mobile base stations.
- Audio-visual equipment including TVs and VCRs.
- Other electronic equipment including HDDs and ODDs.

SPECIFICATIONS

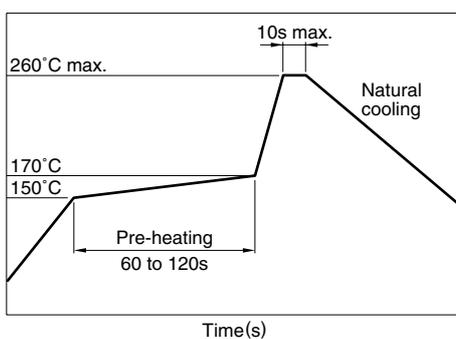
Operating temperature range	-40 to +105°C [Including self-temperature rise]
Storage temperature range	-40 to +105°C

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

NLC	453232	T-	2R2	K	-	PF
(1)	(2)	(3)	(4)	(5)	(6)	

(1) Series name

(2) Dimensions

453232	4.5×3.2×3.2mm (L×W×T)
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(3) Packaging style

T	Taping (reel)
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(4) Inductance value

1R0	1 μ H
100	10 μ H
101	100 μ H

(5) Inductance tolerance

K	\pm 10%
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(6) Lead-free compatible product

PF	Lead-free compatible product
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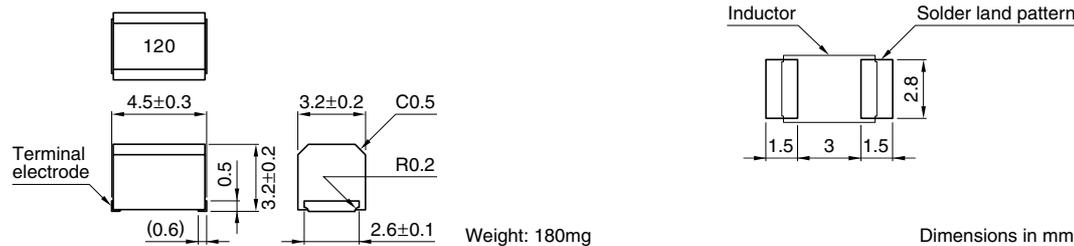
PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	500 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



Weight: 180mg

Dimensions in mm

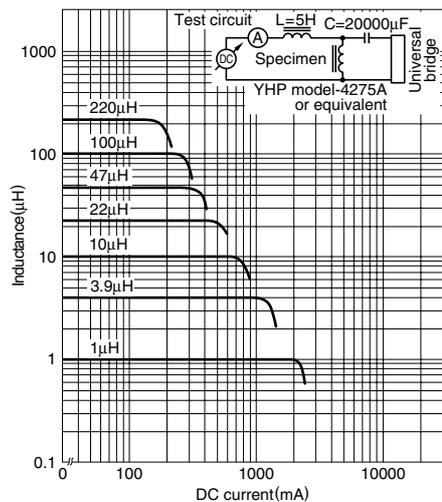
ELECTRICAL CHARACTERISTICS

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	±10%	10	7.96	200	0.11	1050	NLC453232T-1R0K-PF
1.2	±10%	10	7.96	160	0.12	1000	NLC453232T-1R2K-PF
1.5	±10%	10	7.96	130	0.15	950	NLC453232T-1R5K-PF
1.8	±10%	10	7.96	100	0.16	900	NLC453232T-1R8K-PF
2.2	±10%	10	7.96	80	0.18	850	NLC453232T-2R2K-PF
2.7	±10%	10	7.96	60	0.2	800	NLC453232T-2R7K-PF
3.3	±10%	10	7.96	45	0.22	750	NLC453232T-3R3K-PF
3.9	±10%	10	7.96	40	0.24	700	NLC453232T-3R9K-PF
4.7	±10%	10	7.96	35	0.27	650	NLC453232T-4R7K-PF
5.6	±10%	10	7.96	30	0.3	650	NLC453232T-5R6K-PF
6.8	±10%	10	7.96	28	0.35	600	NLC453232T-6R8K-PF
8.2	±10%	10	7.96	25	0.4	600	NLC453232T-8R2K-PF
10	±10%	10	2.52	22	0.5	550	NLC453232T-100K-PF
12	±10%	10	2.52	21	0.6	500	NLC453232T-120K-PF
15	±10%	10	2.52	20	0.7	450	NLC453232T-150K-PF
18	±10%	10	2.52	19	0.8	400	NLC453232T-180K-PF
22	±10%	10	2.52	18	0.9	370	NLC453232T-220K-PF
27	±10%	10	2.52	16	1.2	330	NLC453232T-270K-PF
33	±10%	10	2.52	14	1.4	300	NLC453232T-330K-PF
39	±10%	10	2.52	12	1.6	280	NLC453232T-390K-PF
47	±10%	10	2.52	11.5	1.9	260	NLC453232T-470K-PF
56	±10%	10	2.52	11	2.2	240	NLC453232T-560K-PF
68	±10%	10	2.52	10	2.6	220	NLC453232T-680K-PF
82	±10%	10	2.52	9	3.5	200	NLC453232T-820K-PF
100	±10%	20	0.796	8	4	180	NLC453232T-101K-PF
120	±10%	20	0.796	7.5	4.5	160	NLC453232T-121K-PF
150	±10%	20	0.796	7	6.5	140	NLC453232T-151K-PF
180	±10%	20	0.796	6.5	7.5	120	NLC453232T-181K-PF
220	±10%	20	0.796	5.5	9	120	NLC453232T-221K-PF
270	±10%	20	0.796	5	11	100	NLC453232T-271K-PF
330	±10%	20	0.796	4	13	90	NLC453232T-331K-PF

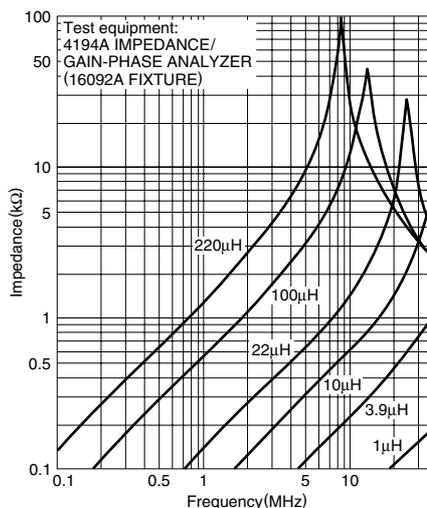
* Rated current: Value obtained when current flows and the temperature has risen to 20°C or when DC current flows and the initial value of inductance has fallen by 10%, whichever is smaller.

- Test equipment L, Q: YHP4194A IMPEDANCE ANALYZER+YHP16085A+YHP16093B+TF-1, or equivalent
SRF: HP8753C NETWORK ANALYZER (Z_{in}=Z_{out}=50Ω), or equivalent
Rdc: MATSUSHITA VP-2941A DIGITAL MILLIOHM METER, or equivalent

TYPICAL ELECTRICAL CHARACTERISTICS INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



IMPEDANCE vs. FREQUENCY CHARACTERISTICS



• All specifications are subject to change without notice.

SMD Inductors(Coils) For Power Line(Wound)

Conformity to RoHS Directive

NLC Series NLC565050

FEATURES

- The NLC series feature low DC resistance and high current handling capacities, making them ideal for power supply line applications.
- 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.
- From 1 μ H to 1000 μ H, all of the products in the E-12 series are K(\pm 10%) tolerance products.
- It is a product conforming to RoHS directive.

APPLICATIONS

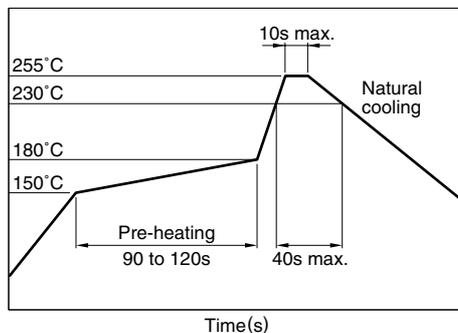
- Electronic equipment used in communication infrastructures including xDSL and mobile base stations.
- Audio-visual equipment including TVs and VCRs.
- Other electronic equipment including HDDs and ODDs.

SPECIFICATIONS

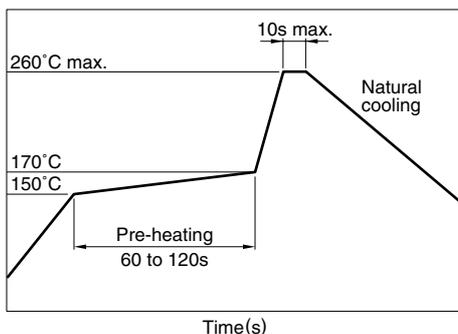
Operating temperature range	-40 to +105°C [Including self-temperature rise]
Storage temperature range	-40 to +105°C

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

NLC	565050	T	2R2	K	- PF
(1)	(2)	(3)	(4)	(5)	(6)

(1) Series name

(2) Dimensions

565050	5.6×5.0×5.0mm(L×W×T)
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(3) Packaging style

T	Taping(reel)
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(4) Inductance value

1R0	1 μ H
100	10 μ H
101	100 μ H
102	1000 μ H

(5) Inductance tolerance

K	\pm 10%
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(6) Lead-free compatible product

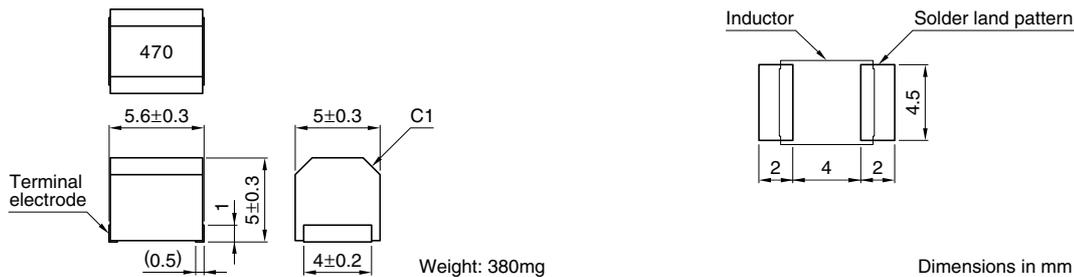
PF	Lead-free compatible product
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PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	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.

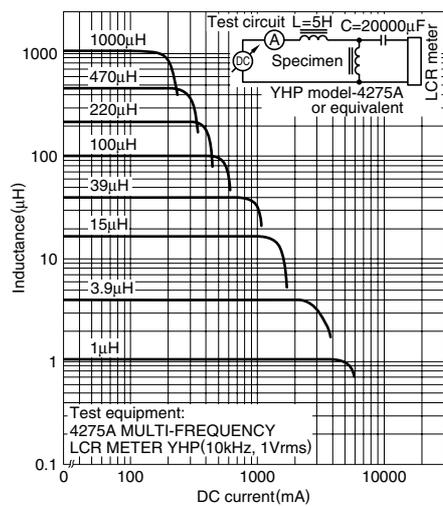
SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN

ELECTRICAL CHARACTERISTICS

Inductance (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	±10%	10	7.96	95	0.03	1800	NLC565050T-1R0K-PF
1.2	±10%	10	7.96	70	0.035	1700	NLC565050T-1R2K-PF
1.5	±10%	10	7.96	55	0.04	1600	NLC565050T-1R5K-PF
1.8	±10%	10	7.96	47	0.05	1400	NLC565050T-1R8K-PF
2.2	±10%	10	7.96	42	0.06	1300	NLC565050T-2R2K-PF
2.7	±10%	10	7.96	37	0.07	1200	NLC565050T-2R7K-PF
3.3	±10%	10	7.96	34	0.08	1120	NLC565050T-3R3K-PF
3.9	±10%	10	7.96	32	0.09	1050	NLC565050T-3R9K-PF
4.7	±10%	10	7.96	29	0.11	950	NLC565050T-4R7K-PF
5.6	±10%	10	7.96	26	0.13	880	NLC565050T-5R6K-PF
6.8	±10%	10	7.96	24	0.15	810	NLC565050T-6R8K-PF
8.2	±10%	10	7.96	22	0.18	750	NLC565050T-8R2K-PF
10	±10%	10	2.52	19	0.21	690	NLC565050T-100K-PF
12	±10%	10	2.52	17	0.25	630	NLC565050T-120K-PF
15	±10%	10	2.52	16	0.3	580	NLC565050T-150K-PF
18	±10%	10	2.52	14	0.36	530	NLC565050T-180K-PF
22	±10%	10	2.52	13	0.43	480	NLC565050T-220K-PF
27	±10%	10	2.52	11.5	0.52	440	NLC565050T-270K-PF
33	±10%	10	2.52	10.5	0.62	400	NLC565050T-330K-PF
39	±10%	10	2.52	9.5	0.72	370	NLC565050T-390K-PF
47	±10%	10	2.52	8.5	0.85	340	NLC565050T-470K-PF
56	±10%	10	2.52	7.8	1	310	NLC565050T-560K-PF
68	±10%	10	2.52	7	1.2	290	NLC565050T-680K-PF
82	±10%	10	2.52	6.4	1.4	270	NLC565050T-820K-PF
100	±10%	20	0.796	6	1.6	250	NLC565050T-101K-PF
120	±10%	20	0.796	5.4	1.9	230	NLC565050T-121K-PF
150	±10%	20	0.796	4.8	2.2	210	NLC565050T-151K-PF
180	±10%	20	0.796	4.4	2.8	190	NLC565050T-181K-PF
220	±10%	20	0.796	3.9	3.4	170	NLC565050T-221K-PF
270	±10%	20	0.796	3.6	4.2	155	NLC565050T-271K-PF
330	±10%	20	0.796	3.2	4.9	140	NLC565050T-331K-PF
390	±10%	20	0.796	2.9	5.8	130	NLC565050T-391K-PF
470	±10%	20	0.796	2.6	7	120	NLC565050T-471K-PF
560	±10%	20	0.796	2.4	8.5	110	NLC565050T-561K-PF
680	±10%	20	0.796	2.2	10	100	NLC565050T-681K-PF
820	±10%	20	0.796	2	13	90	NLC565050T-821K-PF
1000	±10%	20	0.252	1.8	15	85	NLC565050T-102K-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+YHP16085A+YHP16093B+TF-1, or equivalent
SRF: HP8753C NETWORK ANALYZER (Z_{in}=Z_{out}=50Ω), or equivalent
Rdc: MATSUSHITA VP-2941A DIGITAL MILLIOHM METER, or equivalent

TYPICAL ELECTRICAL CHARACTERISTICS INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



• All specifications are subject to change without notice.