

Inductors

For Power Line

SMD

NLFC Series NLFC5650 Type

FEATURES

- The NLFC series features magnetic shielding and is recommended for power supply line applications.
- They are available in 5 form factors ranging from 2016 to 5650.

APPLICATIONS

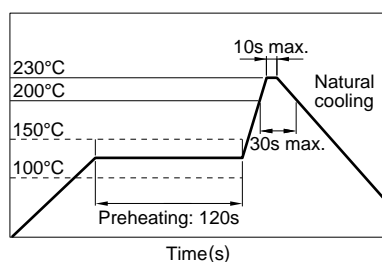
Personal computers, hard disk drives, and other electronic equipment.

SPECIFICATIONS

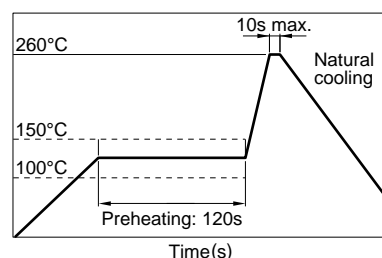
Type	Operating temperature range	Storage temperature range [Unit of products]
NLFC201614	-20 to +85°C	-40 to +85°C
NLFC252018	-20 to +85°C	-40 to +85°C
NLFC322522	-20 to +85°C	-40 to +85°C
NLFC453232	-20 to +80°C	-40 to +80°C
NLFC565050	-20 to +85°C	-40 to +85°C

RECOMMENDED SOLDERING CONDITIONS

REFLOW SOLDERING



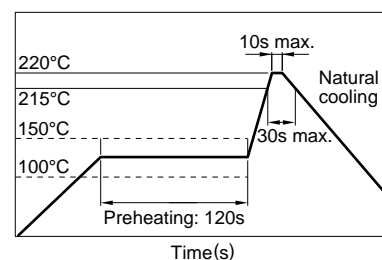
FLOW SOLDERING



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	Chlorine-based solvent (Do not use acid or alkali solvents.)
Time	2min max.

PRODUCT IDENTIFICATION

NLFC	201614	T-	2R2	M
(1)	(2)	(3)	(4)	(5)

(1) Series name

(2) Dimensions L×W×T

201614	2.1×1.6×1.4mm
252018	2.5×2.0×1.8mm
322522	3.2×2.5×2.2mm
453232	4.5×3.2×3.2mm
565050	5.6×5.0×5.0mm

(3) Packaging style

T	Taping (reel)
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(4) Inductance value

1R0	1μH
220	22μH

(5) Inductance tolerance

K	±10%
M	±20%

PACKAGING STYLE AND QUANTITIES

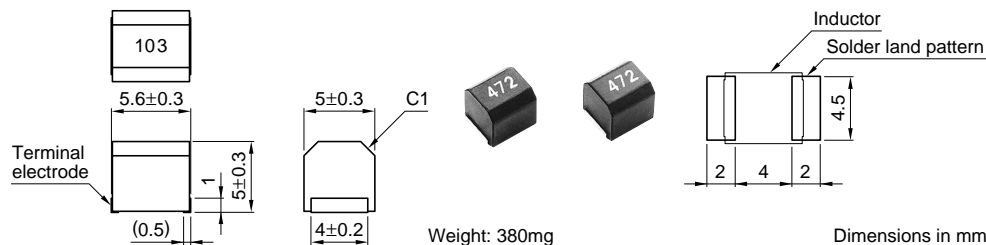
Packaging style	Type	Quantity
Taping	NLFC201614T	2000 pieces/reel
	NLFC252018T	2000 pieces/reel
	NLFC322522T	2000 pieces/reel
	NLFC453232T	500 pieces/reel
	NLFC565050T	400 pieces/reel

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SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



ELECTRICAL CHARACTERISTICS

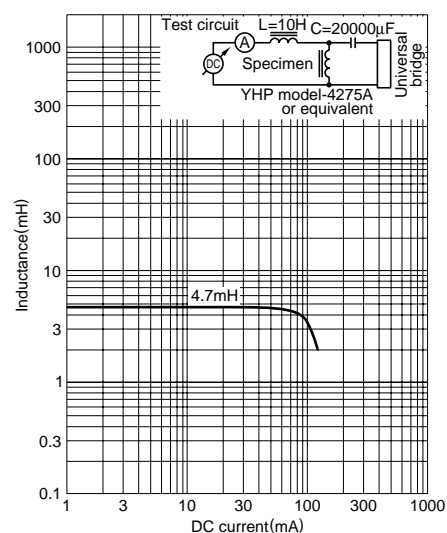
Inductance (mH)	Inductance tolerance	Q min.	Test frequency L, Q (MHz)	Self-resonant frequency (MHz)min.	DC resistance (Ω)max.	Rated current (mA) max.	Part No.
1.5	$\pm 10\%$	30	0.252	1.5	7.5	50	NLFC565050T-152K
2.2	$\pm 10\%$	30	0.252	1.2	15	40	NLFC565050T-222K
3.3	$\pm 10\%$	30	0.252	0.8	15	33	NLFC565050T-332K
4.7	$\pm 10\%$	30	0.252	0.6	20	30	NLFC565050T-472K
6.8	$\pm 10\%$	30	0.252	0.5	30	25	NLFC565050T-682K
10	$\pm 10\%$	30	0.0796	0.45	55	20	NLFC565050T-103K
15	$\pm 10\%$	30	0.0796	0.4	90	15	NLFC565050T-153K
22	$\pm 10\%$	30	0.0796	0.35	120	13	NLFC565050T-223K
33	$\pm 10\%$	30	0.0796	0.3	190	11	NLFC565050T-333K
47	$\pm 10\%$	30	0.0796	0.25	250	9	NLFC565050T-473K
68	$\pm 10\%$	30	0.0796	0.2	320	7	NLFC565050T-683K
100	$\pm 10\%$	10	0.01	0.16	480	4	NLFC565050T-104K

• Inductance tolerance: Value of inductance corresponds to inductance value of standard products.

• Test equipment L, Q: YHP4194A IMPEDANCE ANALYZER+YHP16085A+YHP16093B+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

