

Inductors

For Power Line SMD

NLFC Series NLFC2016 Type

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 NLFC series features magnetic shielding and is recommended for power supply line applications.
- They are available in ranging from 2016 to 4532 types.

APPLICATIONS

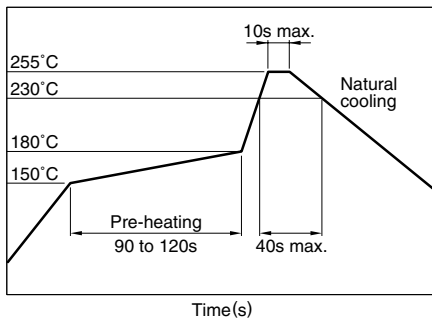
Personal computers, hard disk drives, and other electronic equipment.

SPECIFICATIONS

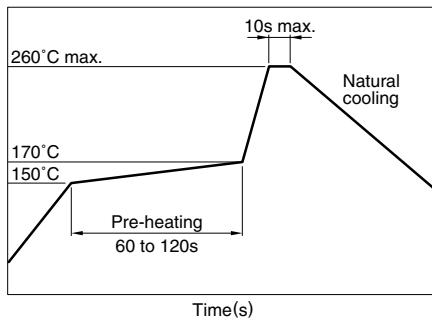
Operating temperature range	-40 to +85°C
Storage temperature range	-40 to +85°C [Unit of products]

RECOMMENDED SOLDERING CONDITIONS

REFLOW SOLDERING



FLOW SOLDERING



IRON SOLDERING

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

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

NLFC	201614	T-	2R2	M	-PF
(1)	(2)	(3)	(4)	(5)	(6)

(1)Series name

(2)Dimensions L×W×T

201614	2.1×1.6×1.4mm
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(3)Packaging style

T	Taping (reel)
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(4)Inductance value

1R0	1μH
220	22μH

(5)Inductance tolerance

K	±10%
M	±20%

(6) Lead-free compatible product

PF	Lead-free compatible product
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PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	2000 pieces/reel

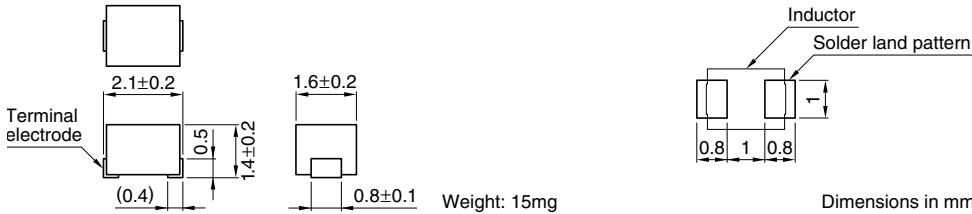
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For Power Line

SMD

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SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



ELECTRICAL CHARACTERISTICS

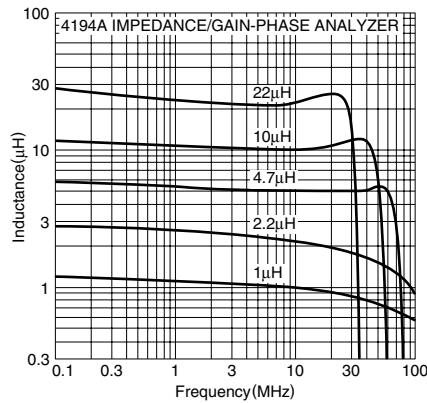
Inductance (μH)	Inductance tolerance	Q ref.	Test frequency L, Q (MHz)	Self-resonant frequency (MHz)min.	DC resistance (Ω)±30%	Rated current (mA)* max.		Part No.
						Based on inductance change	Based on temperature rise	
1	±20%	5	7.96	100	0.16	300	700	NLFC201614T-1R0M-PF
2.2	±20%	5	7.96	80	0.23	240	620	NLFC201614T-2R2M-PF
4.7	±20%	5	7.96	45	0.4	150	430	NLFC201614T-4R7M-PF
10	±10%	10	2.52	32	0.7	120	300	NLFC201614T-100K-PF
22	±10%	10	2.52	16	1.7	75	220	NLFC201614T-220K-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.

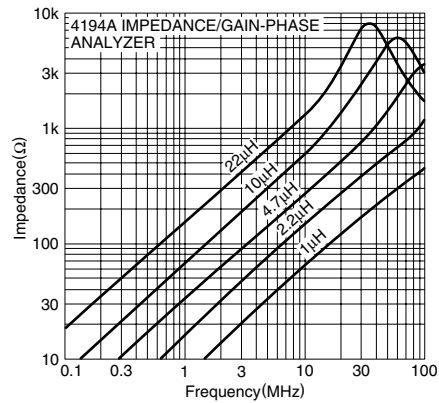
- Test equipment L, Q: YHP4194A IMPEDANCE ANALYZER+YHP16085A+YHP16093B+TF-1, or equivalent
SRF: HP8753C NETWORK ANALYZER (Z_{in}=Z_{out}=50Ω), or equivalent
Rdc: MATSUSHITA VP-2941A DIGITAL MILLIOHM METER, or equivalent

TYPICAL ELECTRICAL CHARACTERISTICS

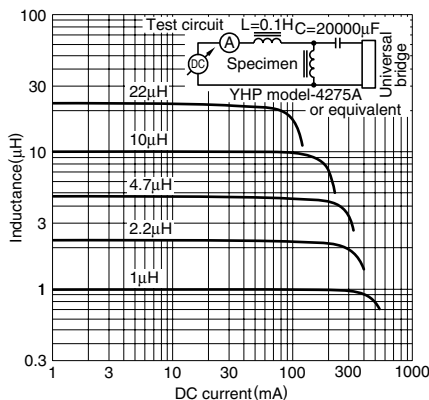
INDUCTANCE vs. FREQUENCY CHARACTERISTICS



IMPEDANCE vs. FREQUENCY CHARACTERISTICS



INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



Q vs. FREQUENCY CHARACTERISTICS

