

# SMD Inductors(Coils)

## For Power Line(Wound, Magnetic Shielded)

Conformity to RoHS Directive

### NLFC Series NLFC3225

#### 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.
- It is a product conforming to RoHS directive.

#### APPLICATIONS

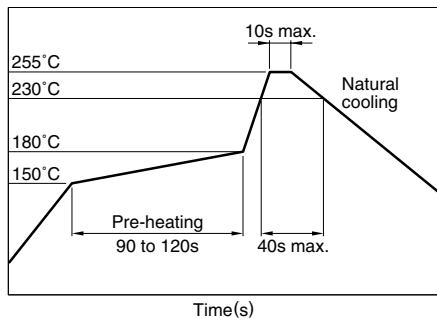
- Audio-visual equipment including TVs, VCRs and digital cameras.
- Electronic equipment used in communication infrastructures including xDSL and mobile base stations.
- Other electronic equipment including HDDs and ODDs.

#### SPECIFICATIONS

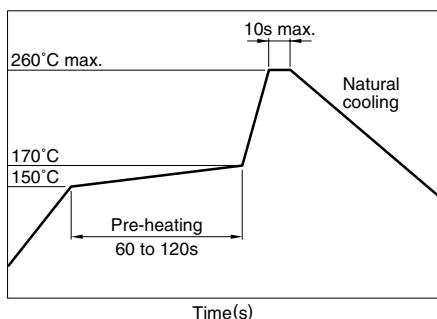
Operating temperature range	-40 to +105°C [Including self-temperature rise]
Storage temperature range	-40 to +105°C

#### 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	322522	T-	2R2	M	-PF
(1)	(2)	(3)	(4)	(5)	(6)

(1)Series name

(2)Dimensions

322522	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	1μH
100	10μH
101	100μH
102	1000μH

(5)Inductance tolerance

K	±10%
M	±20%

(6) Lead-free compatible product

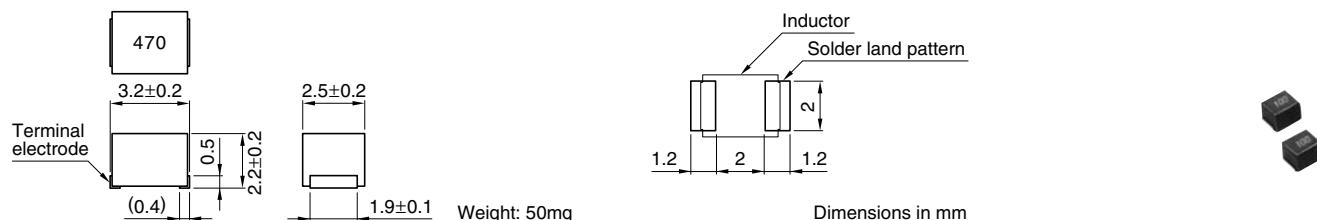
PF	Lead-free compatible product
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#### PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	2000 pieces/reel

- 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 ( $\mu$ H)	Inductance tolerance	Q ref.	Test frequency L, Q (MHz)	Self-resonant frequency (MHz)min.	DC resistance ( $\Omega$ ) $\pm$ 30%	Rated current* (mA)max.	Part No.
1	$\pm$ 20%	5	7.96	100	0.06	500	NLFC322522T-1R0M-PF
1.5	$\pm$ 20%	5	7.96	80	0.08	400	NLFC322522T-1R5M-PF
2.2	$\pm$ 20%	5	7.96	68	0.09	340	NLFC322522T-2R2M-PF
3.3	$\pm$ 20%	5	7.96	54	0.11	270	NLFC322522T-3R3M-PF
4.7	$\pm$ 20%	5	7.96	46	0.13	240	NLFC322522T-4R7M-PF
6.8	$\pm$ 20%	5	7.96	38	0.17	195	NLFC322522T-6R8M-PF
10	$\pm$ 10%	10	2.52	30	0.26	165	NLFC322522T-100K-PF
15	$\pm$ 10%	10	2.52	26	0.32	145	NLFC322522T-150K-PF
22	$\pm$ 10%	10	2.52	21	0.5	115	NLFC322522T-220K-PF
33	$\pm$ 10%	10	2.52	17	0.75	95	NLFC322522T-330K-PF
47	$\pm$ 10%	10	2.52	14	0.95	85	NLFC322522T-470K-PF
68	$\pm$ 10%	10	2.52	12	1.5	70	NLFC322522T-680K-PF
100	$\pm$ 10%	10	0.796	10	2.5	55	NLFC322522T-101K-PF
150	$\pm$ 10%	10	0.796	8	3.2	45	NLFC322522T-151K-PF
220	$\pm$ 10%	10	0.796	7	5.4	35	NLFC322522T-221K-PF
330	$\pm$ 10%	10	0.796	5	7	30	NLFC322522T-331K-PF
470	$\pm$ 10%	10	0.796	4	16	25	NLFC322522T-471K-PF
680	$\pm$ 10%	10	0.796	3	20	20	NLFC322522T-681K-PF
1000	$\pm$ 10%	10	0.252	2.4	24	15	NLFC322522T-102K-PF

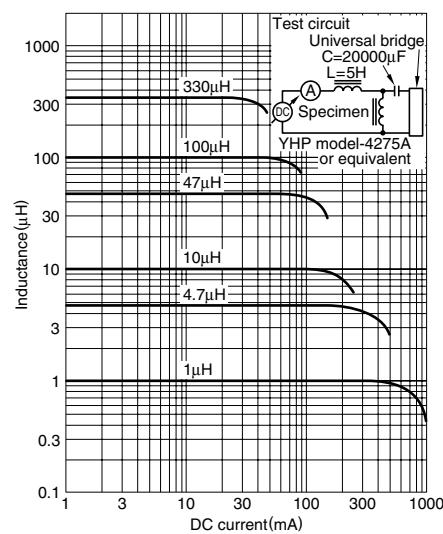
\* Rated current: Value obtained when current flows and the temperature has risen to 20°C or when DC current flows and the initial value of inductance has fallen by 10%, whichever is smaller.

• Test equipment L, Q: YHP4194A IMPEDANCE ANALYZER+YHP16085A+YHP16093B+TF-1, or equivalent

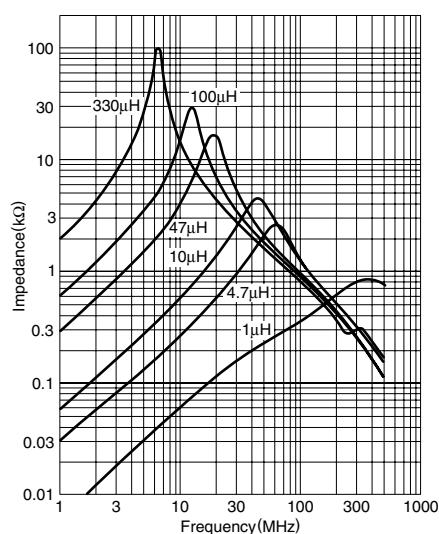
SRF: HP8753C NETWORK ANALYZER ( $Z_{in}=Z_{out}=50\Omega$ ), or equivalent

Rdc: MATSUSHITA VP-2941A DIGITAL MILLIOHM METER, or equivalent

## TYPICAL ELECTRICAL CHARACTERISTICS

INDUCTANCE CHANGE vs. DC SUPERPOSITION  
CHARACTERISTICS

## IMPEDANCE vs. FREQUENCY CHARACTERISTICS



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