### **Inductors**

# For Power Line SMD

# NLC Series NLC3225 Type

(We currently recommend that you switch to the NLCV32 type.)

#### **FEATURES**

- The NLC series feature low DC resistance and high current handling capacities, making them ideal for power supply line applications.
- They are available in ranging from 2520 to 5650 types.

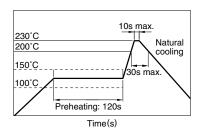
#### **APPLICATIONS**

Portable telephones, personal computers, hard disk drives, and other electronic equipment.

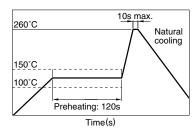
#### **SPECIFICATIONS**

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

# RECOMMENDED SOLDERING CONDITIONS (LEAD-CONTAINING SOLDER) REFLOW SOLDERING



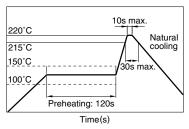
#### **FLOW SOLDERING**



#### **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	Please select the solvent of this product avoiding a strong
	acid and a strong alkali, and considering the environments.
Time	2min max.

#### PRODUCT IDENTIFICATION

NLC	322522	T-	2R2	М
(1)	(2)	(3)	(4)	(5)

- (1) Series name
- (2) Dimensions L×W×T

·	
322522	3.2×2.5×2.2mm

(3) Packaging style

Т	Taping(reel)	

(4) Inductance value

1R0	1μΗ	
330	33μH	

(5) Inductance tolerance

K	±10%	
M	±20%	

#### **PACKAGING STYLE AND QUANTITIES**

Packaging style	Quantity
Taping	2000 pieces/reel

<sup>•</sup> All specifications are subject to change without notice.

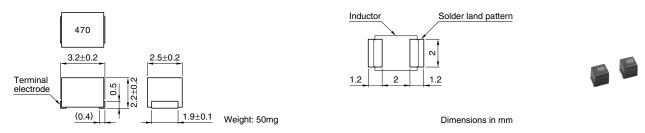
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#### SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



#### **ELECTRICAL CHARACTERISTICS**

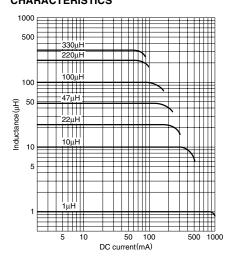
Inductance (µH)	Inductance tolerance	Q ref.	Test frequency L, Q (MHz)	Self-resonant frequency (MHz)min.	DC resistance (Ω)±30%	Rated current (mA)max.	Part No.
1	±20%	10	7.96	100	0.08	850	NLC322522T-1R0M
1.5	±20%	10	7.96	80	0.11	700	NLC322522T-1R5M
2.2	±20%	10	7.96	68	0.13	600	NLC322522T-2R2M
3.3	±20%	10	7.96	54	0.16	500	NLC322522T-3R3M
4.7	±20%	15	7.96	46	0.2	430	NLC322522T-4R7M
6.8	±20%	15	7.96	38	0.27	360	NLC322522T-6R8M
10	±10%	15	2.52	30	0.36	300	NLC322522T-100K
15	±10%	15	2.52	26	0.56	250	NLC322522T-150K
22	±10%	15	2.52	21	0.77	210	NLC322522T-220K
33	±10%	15	2.52	17	1.1	170	NLC322522T-330K
47	±10%	15	2.52	14	1.64	150	NLC322522T-470K
68	±10%	15	2.52	12	2.8	120	NLC322522T-680K
100	±10%	15	0.796	10	3.7	100	NLC322522T-101K
150	±10%	20	0.796	8	6.1	85	NLC322522T-151K
220	±10%	20	0.796	7	8.4	70	NLC322522T-221K
330	±10%	20	0.796	6	12.3	60	NLC322522T-331K

 $<sup>\</sup>bullet \ \text{Test equipment L, Q: YHP4194A IMPEDANCE ANALYZER+YHP16085A+YHP16093B+TF-1, or equivalent} \\$ 

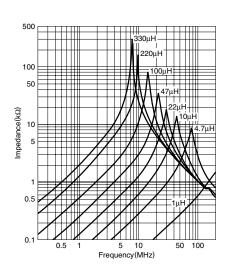
SRF: HP8753C NETWORK ANALYZER (Zin=Zout=50 $\Omega$ ), or equivalent

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

# TYPICAL ELECTRICAL CHARACTERISTICS INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS



#### IMPEDANCE vs. FREQUENCY CHARACTERISTICS



<sup>•</sup> Marking: Inductance tolerance is omitted to distinguish NL series.

<sup>•</sup> All specifications are subject to change without notice.