## Inductors For Power Line

SMD

#### FEATURES

- Provides high Q while using 252018 size winding construction.
- Environmentally friendly due to use of recyclable plastic (thermoplastic).
- Logo omitted to simplify production.
- · Maintains interchangeability with earlier NL product series.
- NLV series are E-6 products, while NLCV and NLFV series are E-3 products.

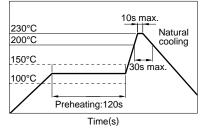
#### APPLICATIONS

PCs, hard disk drives, and other types of electronics

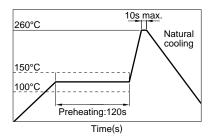
#### SPECIFICATIONS

Tuno	Operating temperature	Storage temperature
Туре	range	range[Unit of products]
NLV25	–20 to +85°C	–40 to +85°C
NLCV25	–20 to +85°C	–40 to +85°C
NLFV25	-20 to +85°C	-40 to +85°C

### RECOMMENDED SOLDERING CONDITIONS REFLOW SOLDERING



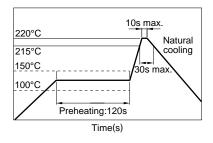
#### FLOW SOLDERING



#### **IRON SOLDERING**

Perform soldering at 250°C on 30W max. within 5 seconds.

#### VAPOR-PHASING



#### PRODUCT IDENTIFICATION

NLV	25	т-	2R2	J
(1)	(2)	(3)	(4)	(5)

#### (1) Series name

(2) Dimensions LxWxT

252018

NLFV Series NLFV25 Type

(3) Packaging style

	-	-	•		
Т				Taping (reel)	

2.5×2.0×1.8mm

(4) Inductance value

 1R0
 1μH

 220
 22μH

#### (5) Inductance tolerance

J	±5%	
К	±10%	
Μ	±20%	

#### PACKAGING STYLE AND QUANTITIES

Packaging style	Туре	Quantity	
Taping	NLV25T	2000 pieces/reel	
	NLCV25T	2000 pieces/reel	
	NLFV25T	2000 pieces/reel	

#### PRECAUTIONS

• The exterior of this product can melt since due to thermoplastic construction. During mechanical contact while at the plastic softening temperature, deformation can occur at the contact location. Therefore caution is required when utilizing a soldering iron during the soldering operation.

#### FLUX AND CLEANING

Rosin-based flux is recommended.

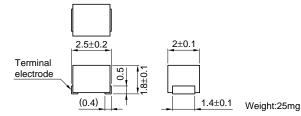
#### **Cleaning Conditions**

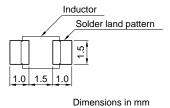
Solvent	Chlorine-based solvent (Do not use acid or alkali solvents.)
Time	2min max.

# Inductors

For Power Line SMD

#### 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)±20%	Rated current (mA)max.	Part No.
1	±20%	5	7.96	100	0.07	455	NLFV25T-1R0M
2.2	±20%	5	7.96	70	0.1	315	NLFV25T-2R2M
4.7	±20%	5	7.96	45	0.24	210	NLFV25T-4R7M
10	±10%	10	2.52	32	0.36	155	NLFV25T-100K
22	±10%	10	2.52	16	1	105	NLFV25T-220K
47	±10%	10	2.52	11	1.7	60	NLFV25T-470K
100	±10%	10	0.796	8	4	40	NLFV25T-101K

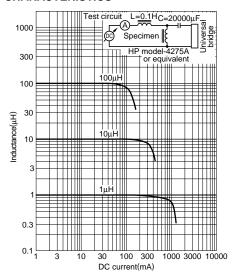
• Test equipment L, Q: HP4194A IMPEDANCE ANALYZER(16085A+16093B+TDK TF-1)

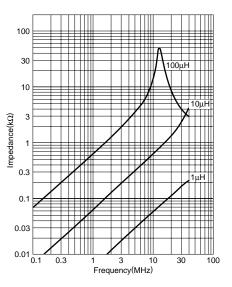
SRF: HP8753C NETWORK ANALYZER

Rdc: MATSUSHITA VP-2941A DIGITAL MILLIOHM METER

#### TYPICAL ELECTRICAL CHARACTERISTICS INDUCTANCE CHANGE vs. DC SUPERPOSITION CHARACTERISTICS

#### IMPEDANCE vs. FREQUENCY CHARACTERISTICS





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