

## **Inductors for High-frequency Circuits**

Wound/STD

### **NLHV** series

Type: NLHV25 2520[1008 inch]\*

\* Dimensions Code JIS[EIA]

Issue date: September 2011

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

<sup>•</sup> 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.

### **&TDK**

# **Inductors for High-frequency Circuits Wound/STD**

### **Conformity to RoHS Directive**

### NLHV Series NLHV25

### **FEATURES**

- High Q-factor is provided in frequency band more than 30MHz in comparison with existing NLV25 series.
- · Land pattern is compatible with an existing series product.
- Lead-free material is used for the plating on the terminal

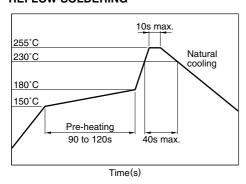
### **APPLICATIONS**

Power supply lines, audio visual systems, IT equipment

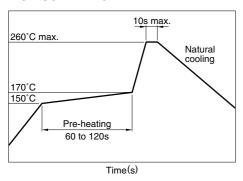
### **SPECIFICATIONS**

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 secconds/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

NLHV	25	Т	R12	J	PF
(1)	(2)	(3)	(4)	(5)	(6)

- (1) Series name
- (2) Dimensions

25	2.5×2.0×1.8mm(L×W×T)

(3) Packaging style

Т	Taping (reel)

(4) Inductance

R12	0.12µH

(5) Inductance tolerance

	. 50/
J	±5%

(6) Lead-free compatible product

PF	Conformity to RoHS directive,		
	exemption regulations apply		
EF	Conformity to RoHS directive		

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### SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN

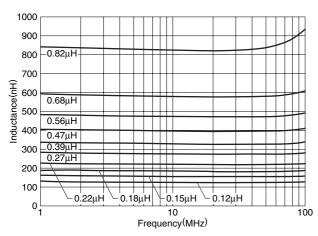


### **ELECTRICAL CHARACTERISTICS**

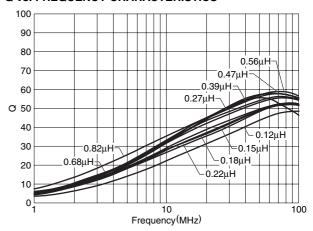
Inductance	Q	Test frequency L,Q	Self-resonant frequency	DC resistance	Rated current	Part No.
tolerance	min.	(MHz)	(MHz)min.	$(\Omega)$ max.	(mA)max.	i ait ivo.
±5%	30	25.2	700	0.38	550	NLHV25T-R12J-□*
±5%	30	25.2	550	0.42	500	NLHV25T-R15J-
±5%	35	25.2	500	0.45	475	NLHV25T-R18J-□
±5%	35	25.2	450	0.5	450	NLHV25T-R22J-□
±5%	35	25.2	425	0.58	425	NLHV25T-R27J-□
±5%	40	25.2	400	0.68	400	NLHV25T-R33J-
±5%	40	25.2	375	0.73	375	NLHV25T-R39J-
±5%	40	25.2	350	0.83	350	NLHV25T-R47J-□
±5%	40	25.2	325	0.93	325	NLHV25T-R56J-□
±5%	40	25.2	180	0.98	300	NLHV25T-R68J-□
±5%	40	25.2	120	1.05	280	NLHV25T-R82J-□
	tolerance ±5% ±5% ±5% ±5% ±5% ±5% ±5% ±5%	tolerance min.   ±5% 30   ±5% 30   ±5% 35   ±5% 35   ±5% 35   ±5% 40   ±5% 40   ±5% 40   ±5% 40   ±5% 40	tolerance min. (MHz)   ±5% 30 25.2   ±5% 30 25.2   ±5% 35 25.2   ±5% 35 25.2   ±5% 35 25.2   ±5% 40 25.2   ±5% 40 25.2   ±5% 40 25.2   ±5% 40 25.2   ±5% 40 25.2   ±5% 40 25.2   ±5% 40 25.2	tolerance min. (MHz) (MHz)min.   ±5% 30 25.2 700   ±5% 30 25.2 550   ±5% 35 25.2 500   ±5% 35 25.2 450   ±5% 35 25.2 425   ±5% 40 25.2 400   ±5% 40 25.2 375   ±5% 40 25.2 350   ±5% 40 25.2 325   ±5% 40 25.2 180	tolerance min. (MHz) (MHz)min. ( $\Omega$ )max.   ±5% 30 25.2 700 0.38   ±5% 30 25.2 550 0.42   ±5% 35 25.2 500 0.45   ±5% 35 25.2 450 0.5   ±5% 35 25.2 425 0.58   ±5% 40 25.2 400 0.68   ±5% 40 25.2 375 0.73   ±5% 40 25.2 350 0.83   ±5% 40 25.2 325 0.93   ±5% 40 25.2 180 0.98	tolerance min. (MHz) (MHz)min. (Ω)max. (mA)max.   ±5% 30 25.2 700 0.38 550   ±5% 30 25.2 550 0.42 500   ±5% 35 25.2 500 0.45 475   ±5% 35 25.2 450 0.5 450   ±5% 35 25.2 425 0.58 425   ±5% 40 25.2 400 0.68 400   ±5% 40 25.2 375 0.73 375   ±5% 40 25.2 350 0.83 350   ±5% 40 25.2 325 0.93 325   ±5% 40 25.2 180 0.98 300

<sup>\* :</sup> Please specify lead-free compatible product, PF (Conformity to RoHS directive, exemption regulations apply) or EF (Conformity to RoHS directive)

### TYPICAL ELECTRICAL CHARACTERISTICS INDUCTANCE vs. FREQUENCY CHARACTERISTICS



### Q vs. FREQUENCY CHARACTERISTICS



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