

# SMD Inductors(Coils) For Power Line(Wound)

Conformity to RoHS Directive

## NLCV Series NLCV25T-R

### FEATURES

- Rated current is maintained in the range of 1.7 to 2.0 times compared to the existing NLCV25 series.
- Stable inductance, as the inductance change in the maximum rated current load is within -10%.
- Maximum operating temperature is +125°C (including self-temperature rise).
- Lead-free material is adopted for terminal soldering.
- PC board pattern is compatible with the existing NLCV25 series.
- This product is in compliance with the RoHS Directive. Other products with specifications that do not include exemption regulations are also available.

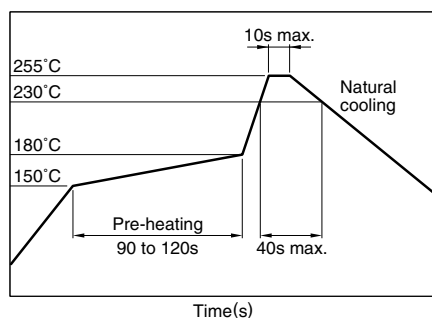
### APPLICATIONS

Power supply lines, audio visual systems, electronic equipment for vehicle, IT equipment

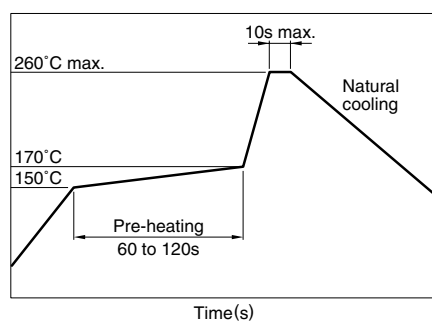
### SPECIFICATIONS

Operating temperature range	-40 to +125°C [Including self-temperature rise]
Storage temperature range	-40 to +125°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

NLCV	25	T	R10	M	-	PF	R
(1)	(2)	(3)	(4)	(5)	(6)	(7)	

(1) Series name

(2) Dimensions

25	2.5×2.0×1.8mm(L×W×T)
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(3) Packaging style

T	Taping (reel)
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(4) Inductance

R10	0.1μH
1R0	1μH
100	10μH

(5) Inductance tolerance

K	±10%
M	±20%

(6) Lead-free compatible product

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

(7) TDK internal code

- 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 (μH)	Inductance tolerance	Q ref.	Test frequency L, Q (MHz)	Self-resonant frequency (MHz)min.	DC resistance (Ω)±20%	Rated current (mA)max.	Part No.
0.1	±20%	5	25.2	800	0.04	1890	NLCV25T-R10M-□R
0.15	±20%	5	25.2	500	0.044	1800	NLCV25T-R15M-□R
0.22	±20%	5	25.2	400	0.05	1690	NLCV25T-R22M-□R
0.33	±20%	5	25.2	300	0.065	1480	NLCV25T-R33M-□R
0.47	±20%	5	25.2	220	0.08	1340	NLCV25T-R47M-□R
0.68	±20%	5	25.2	160	0.09	1260	NLCV25T-R68M-□R
1	±20%	10	7.96	100	0.14	1000	NLCV25T-1R0M-□R
1.5	±20%	10	7.96	80	0.18	890	NLCV25T-1R5M-□R
2.2	±20%	10	7.96	68	0.27	730	NLCV25T-2R2M-□R
3.3	±20%	10	7.96	54	0.44	570	NLCV25T-3R3M-□R
4.7	±20%	10	7.96	46	0.57	500	NLCV25T-4R7M-□R
6.8	±20%	10	7.96	38	0.92	390	NLCV25T-6R8M-□R
10	±10%	15	2.52	30	1.1	360	NLCV25T-100K-□R

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

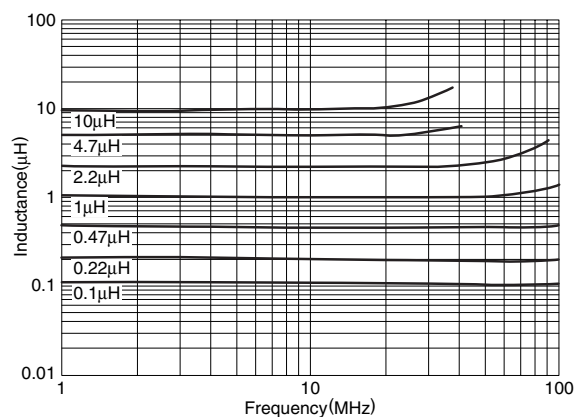
• Test equipment L, Q: HP4194A IMPEDANCE ANALYZER+16085A+16093B+TF-1

SRF: HP8753C NETWORK ANALYZER

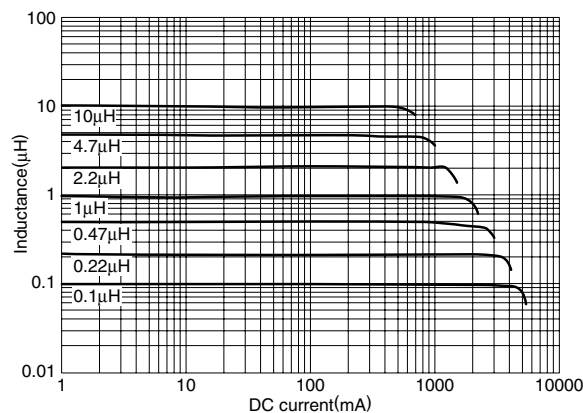
Rdc: MATSUSHITA VP-2941A DIGITAL MILLIOHM METER

## TYPICAL ELECTRICAL CHARACTERISTICS

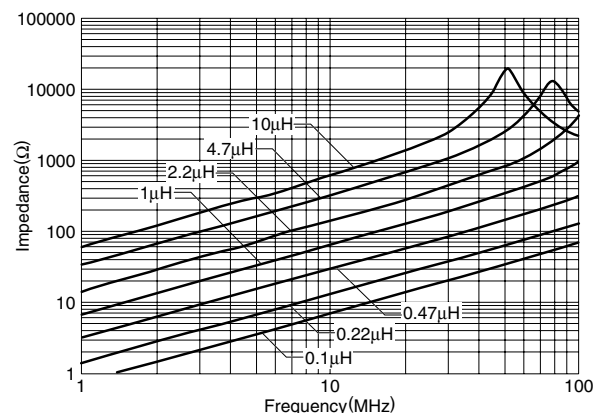
### INDUCTANCE vs. FREQUENCY CHARACTERISTICS



### INDUCTANCE vs. DC SUPERPOSITION CHARACTERISTICS



### IMPEDANCE vs. FREQUENCY CHARACTERISTICS



• All specifications are subject to change without notice.