

Inductors

For Power Line SMD

NLCV Series NLCV25 Type

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 electrical characteristics, reliability, shape and pad shape are the same as the previous NL series.
- The product uses metal terminals, which realize excellent connection reliability.
- Highly heat resistant thermoplastic resin is used to form the exterior package.
- From 1μH to 33μH, all of the products are available in the E-6 series.
- This product conforms to the RoHS standard.

APPLICATIONS

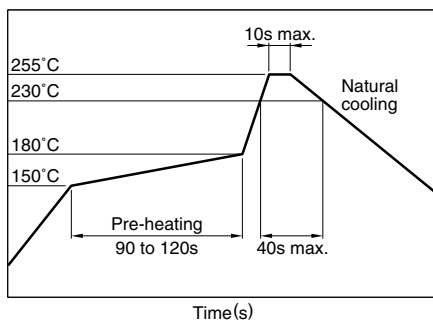
PCs, hard disk drives, and other types of electronics

SPECIFICATIONS

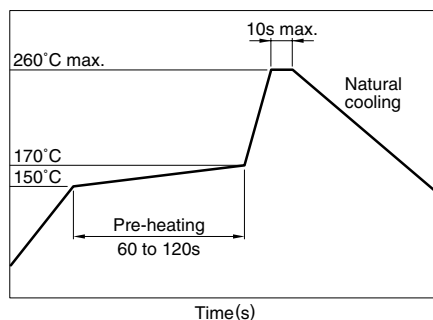
Operating temperature range	-40 to +85°C
Storage temperature range	-40 to +85°C [Unit of products]

RECOMMENDED SOLDERING CONDITIONS

REFLOW SOLDERING



FLOW SOLDERING



IRON SOLDERING

Tip temperature	300 to 350°C
Heating time	3 sec/soldering
Soldering rod specifications	Output: 30W Tip diameter: approx.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-	2R2	M	- PF
(1)	(2)	(3)	(4)	(5)	(6)

(1) Series name

(2) Dimensions LxWxT

25	2.5×2.0×1.8mm
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(3) Packaging style

T	Taping (reel)
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(4) Inductance value

1R0	1μH
220	22μH

(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

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

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For Power Line

SMD

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SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



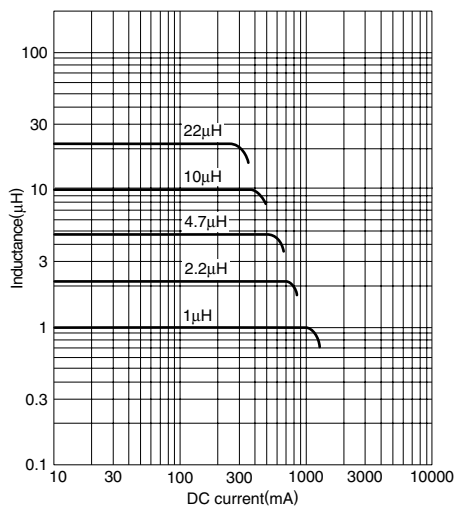
ELECTRICAL CHARACTERISTICS

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%	20	7.96	200	0.34	475	NLCV25T-1R0M-PF
1.5	±20%	20	7.96	165	0.42	435	NLCV25T-1R5M-PF
2.2	±20%	20	7.96	95	0.5	390	NLCV25T-2R2M-PF
3.3	±20%	20	7.96	55	0.65	340	NLCV25T-3R3M-PF
4.7	±20%	20	7.96	43	0.8	285	NLCV25T-4R7M-PF
6.8	±20%	20	7.96	39	1	275	NLCV25T-6R8M-PF
10	±10%	30	2.52	32	1.69	210	NLCV25T-100K-PF
15	±10%	30	2.52	21	2.2	175	NLCV25T-150K-PF
22	±10%	30	2.52	18	2.8	160	NLCV25T-220K-PF
33	±10%	30	2.52	16	4.2	120	NLCV25T-330K-PF

- Test equipment L, Q: HP4194A IMPEDANCE/GAIN PHASE ANALYZER+HP16085A+HP16093 B+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

