

# Inductors

## For Power Line SMD

# NLFV Series NLFV25 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 product uses metal terminals, which realize excellent connection reliability.
- From 1μH to 100μH, all of the products are available in the E-6 series.
- This product conforms to the standards that are slated to be introduced under the RoHS Directive.

### APPLICATIONS

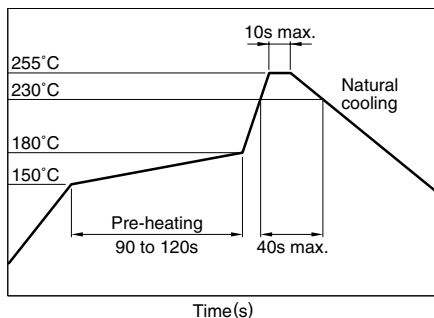
- Audio-visual equipment including TVs, VCRs and digital cameras.
- Electronic equipment used in communication infrastructures including xDSL and mobile base stations.
- Electronic equipment used in onboard automobile equipment including car audio and ECU systems.
- Other electronic equipment including HDDs and ODDs.

### SPECIFICATIONS

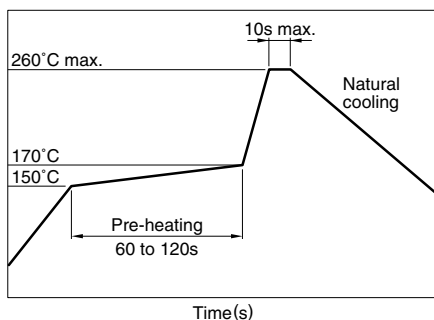
Operating temperature range	-40 to +105°C [Including self-temperature rise]
Storage temperature range	-40 to +105°C

### RECOMMENDED SOLDERING CONDITIONS

#### REFLOW SOLDERING



#### FLOW SOLDERING



### IRON SOLDERING

Tip temperature	300 to 350°C
Heating time	3 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

NLFV	25	T-	2R2	M	-PF
(1)	(2)	(3)	(4)	(5)	(6)

(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 value

1R0	1μH
100	10μH
101	100μH

(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

- Regarding RoHS Directive conformity: This claim is based on the individual judgment made by TDK Corporation that this product conforms to EU Directive 2002/95/EC. This does not constitute a guarantee that the product conforms to all laws and regulations based on the RoHS Directive enacted in individual EU member states.

- All specifications are subject to change without notice.

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## For Power Line

### SMD

## NLFV Series NLFV25 Type

### SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



### ELECTRICAL CHARACTERISTICS

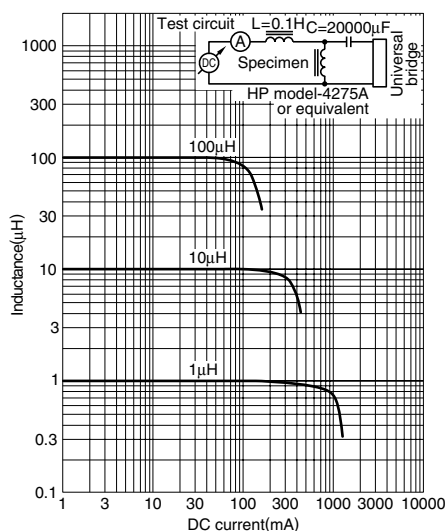
Inductance (μH)	Inductance tolerance	Q ref.	Test frequency L,Q (MHz)	Self-resonant frequency (MHz)min.	DC resistance (Ω)±20%	Rated current* (mA)max.	Part No.
1	±20%	5	7.96	100	0.07	455	NLFV25T-1R0M-PF
1.5	±20%	5	7.96	80	0.09	350	NLFV25T-1R5M-PF
2.2	±20%	5	7.96	70	0.1	315	NLFV25T-2R2M-PF
3.3	±20%	5	7.96	55	0.2	280	NLFV25T-3R3M-PF
4.7	±20%	5	7.96	45	0.24	210	NLFV25T-4R7M-PF
6.8	±20%	5	7.96	38	0.29	175	NLFV25T-6R8M-PF
10	±10%	10	2.52	32	0.36	155	NLFV25T-100K-PF
15	±10%	10	2.52	28	0.75	130	NLFV25T-150K-PF
22	±10%	10	2.52	16	1	105	NLFV25T-220K-PF
33	±10%	10	2.52	14	1.4	85	NLFV25T-330K-PF
47	±10%	10	2.52	11	1.7	60	NLFV25T-470K-PF
68	±10%	10	2.52	10	3.3	50	NLFV25T-680K-PF
100	±10%	10	0.796	8	4	40	NLFV25T-101K-PF

\* Rated current: Value obtained when current flows and the temperature has risen to 20°C or when DC current flows and the initial value of inductance has fallen by 10%, whichever is smaller.

- 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

