

Inductors

For Power Line SMD

NLFV Series NLFV25 Type

FEATURES

- Provides low DC resistance while using 252018 size winding construction.
- Environmentally friendly due to use of recyclable plastic (thermoplastic).
- Logo omitted to simplify production.
- NLFV25 series are E-6 products.

APPLICATIONS

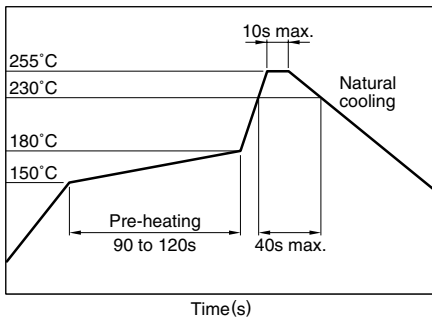
PCs, hard disk drives, and other types of electronics

SPECIFICATIONS

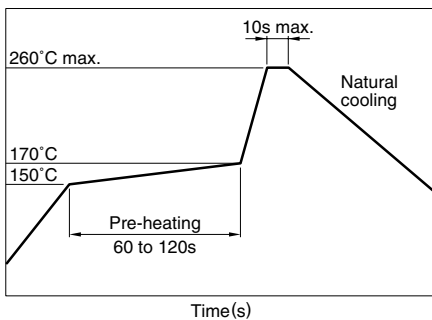
| | |
|-----------------------------|---------------------------------|
| Operating temperature range | -20 to +85°C |
| Storage temperature range | -40 to +85°C [Unit of products] |

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: 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 LxWxT

| | |
|----|---------------|
| 25 | 2.5×2.0×1.8mm |
|----|---------------|

(3) Packaging style

| | |
|---|---------------|
| T | Taping (reel) |
|---|---------------|

(4) Inductance value

| | |
|-----|------|
| 1R0 | 1μH |
| 220 | 22μH |

(5) Inductance tolerance

| | |
|---|------|
| K | ±10% |
| M | ±20% |

(6) Lead-free compatible product

| | |
|----|------------------------------|
| PF | Lead-free compatible product |
|----|------------------------------|

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. |

Inductors

For Power Line

SMD

NLFV Series NLFV25 Type

SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



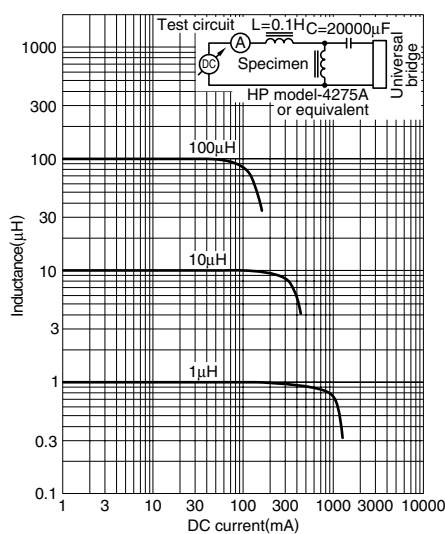
ELECTRICAL CHARACTERISTICS

| 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 |
| 1.5 | ±20% | 5 | 7.96 | 80 | 0.09 | 350 | NLFV25T-1R5M |
| 2.2 | ±20% | 5 | 7.96 | 70 | 0.1 | 315 | NLFV25T-2R2M |
| 3.3 | ±20% | 5 | 7.96 | 55 | 0.2 | 280 | NLFV25T-3R3M |
| 4.7 | ±20% | 5 | 7.96 | 45 | 0.24 | 210 | NLFV25T-4R7M |
| 6.8 | ±20% | 5 | 7.96 | 38 | 0.29 | 175 | NLFV25T-6R8M |
| 10 | ±10% | 10 | 2.52 | 32 | 0.36 | 155 | NLFV25T-100K |
| 15 | ±10% | 10 | 2.52 | 28 | 0.75 | 130 | NLFV25T-150K |
| 22 | ±10% | 10 | 2.52 | 16 | 1 | 105 | NLFV25T-220K |
| 33 | ±10% | 10 | 2.52 | 14 | 1.4 | 85 | NLFV25T-330K |
| 47 | ±10% | 10 | 2.52 | 11 | 1.7 | 60 | NLFV25T-470K |
| 68 | ±10% | 10 | 2.52 | 10 | 3.3 | 50 | NLFV25T-680K |
| 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

