

# Leadless Power Inductors P·I Series 〈Applicable for Automotives〉



• Precautions (see page 93)

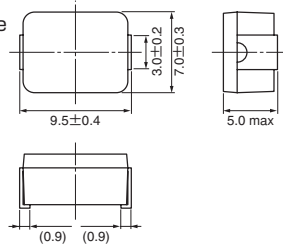
● P·I Series

| Type                          | Model      | Inductance (μH) at 100kHz | DC resistance (Ω) max. | Rated current (A) |
|-------------------------------|------------|---------------------------|------------------------|-------------------|
| Choke coil<br>(9×7×5)         | P·I-470LSF | 47±25%                    | 0.46                   | 0.7               |
|                               | P·I-220LSF | 22±25%                    | 0.30                   | 0.9               |
|                               | P·I-120LSF | 12±25%                    | 0.20                   | 1.0               |
|                               | P·I-5R6LSF | 5.6±30%                   | 0.10                   | 1.6               |
|                               | P·I-3R3LSF | 3.3±30%                   | 0.08                   | 2.0               |
| Choke coil<br>(12×10×6)       | P·I-221LMF | 220±25%                   | 1.25                   | 0.5               |
|                               | P·I-151LMF | 150±25%                   | 0.95                   | 0.6               |
|                               | P·I-121LMF | 125±25%                   | 0.60                   | 0.8               |
|                               | P·I-680LMF | 68±25%                    | 0.45                   | 0.8               |
|                               | P·I-330LMF | 33±25%                    | 0.30                   | 1.0               |
|                               | P·I-180LMF | 18±25%                    | 0.15                   | 1.7               |
|                               | P·I-8R2LMF | 8.2±30%                   | 0.10                   | 2.3               |
| Noise suppressor<br>(9×7×5)   | P·I-820ZSF | 82±25%                    | 0.48                   | 0.6               |
|                               | P·I-470ZSF | 47±25%                    | 0.30                   | 0.7               |
|                               | P·I-390ZSF | 39±25%                    | 0.31                   | 0.8               |
|                               | P·I-180ZSF | 18±25%                    | 0.20                   | 1.0               |
|                               | P·I-100ZSF | 10±25%                    | 0.12                   | 1.5               |
|                               | P·I-4R7ZSF | 4.7±30%                   | 0.08                   | 2.0               |
|                               | P·I-1R2ZSF | 1.2±30%                   | 0.05                   | 3.0               |
| Noise suppressor<br>(12×10×6) | P·I-331ZMF | 330±25%                   | 1.40                   | 0.5               |
|                               | P·I-181ZMF | 180±25%                   | 0.85                   | 0.6               |
|                               | P·I-121ZMF | 120±25%                   | 0.48                   | 0.8               |
|                               | P·I-560ZMF | 56±25%                    | 0.35                   | 1.0               |
|                               | P·I-270ZMF | 27±25%                    | 0.15                   | 1.7               |
|                               | P·I-150ZMF | 15±25%                    | 0.10                   | 2.2               |
|                               | P·I-2R7ZMF | 2.7±30%                   | 0.07                   | 2.9               |

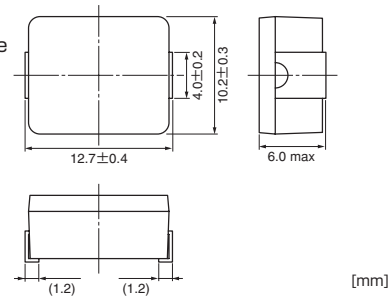
● Operating temperature range: -40 to +120°C (including self-temperature rise)

## Shape and Dimensions

● S Type

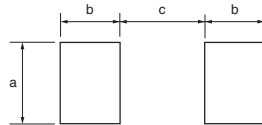


● M Type



[mm]

## Recommended Land Pattern



| Type | a   | b   | c   |
|------|-----|-----|-----|
| S    | 5.0 | 5.0 | 6.0 |
| M    | 6.0 | 5.0 | 9.0 |

[mm]

Choke Coils VOL.07



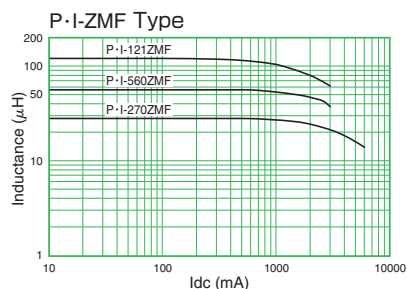
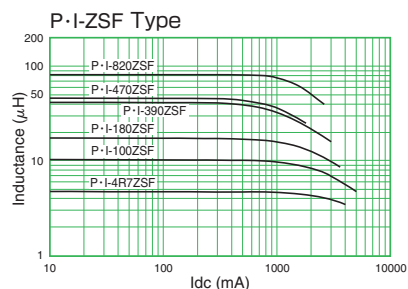
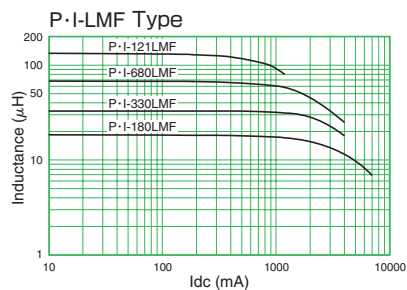
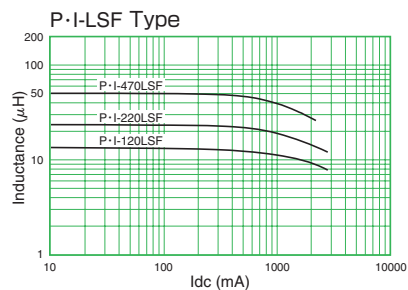
- All specifications in this catalog and production status of products are subject to change without notice. Prior to the purchase, please contact NEC TOKIN for updated product data.
- Please request for a specification sheet for detailed product data prior to the purchase.
- Before using the product in this catalog, please read "Precautions" and other safety precautions listed in the printed version catalog.

## Numbering System

P-I - ○○○○ ○ ○ △△  
 ① ② ③ ④ ⑤

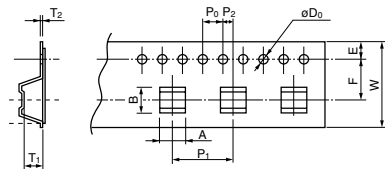
- ① Series
- ② Inductance 120:12 $\mu$ H, 121:120 $\mu$ H, 4R7:4.7 $\mu$ H
- ③ Type L : Choke Coils, Z : Noise suppressor
- ④ Dimensions
- ⑤ NEC TOKIN control number

## DC-Superposed Characteristics



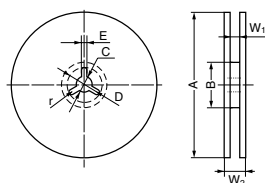
## P-I-S Series (1000pcs./reel)

## Dimensions of indented square hole plastic tape



| [mm] |       |      |      |      |                |                |                |                 |                |                |  |
|------|-------|------|------|------|----------------|----------------|----------------|-----------------|----------------|----------------|--|
| A    | B     | W    | F    | E    | P <sub>1</sub> | P <sub>2</sub> | P <sub>0</sub> | øD <sub>0</sub> | T <sub>1</sub> | T <sub>2</sub> |  |
| ±0.2 | ±0.1  | ±0.3 | ±0.1 | ±0.1 | ±0.1           | ±0.1           | ±0.1           | ±0.05           | ±0.1           | ±0.05          |  |
| 8.2  | 10.05 | 16   | 7.5  | 1.75 | 12             | 2.0            | 4.0            | 1.55            | 4.7            | 0.38           |  |

## Reel dimensions



| [mm] |      |      |      |      |      |                |                |
|------|------|------|------|------|------|----------------|----------------|
| A    | B    | C    | D    | E    | r    | W <sub>1</sub> | W <sub>2</sub> |
| ±2.0 | ±5.0 | ±0.5 | ±0.8 | ±0.5 |      |                |                |
| 330  | 80   | 13   | 21   | 2.0  | R1.0 | 16             | 25             |

Choke Coils VOL.07



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