

## PWD 0315 Series SMD Unshielded Power Inductor

### Features

- Small size and low profile.
- Open magnetic circuit.
- Competitive cost solution.

### Applications

- DC/DC buck, Boost application.
- Ideally used in Notebook PC, LCD TV, DVD, Game machine, STB, Projector etc.

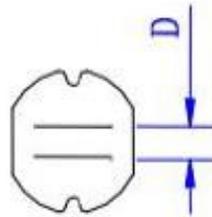
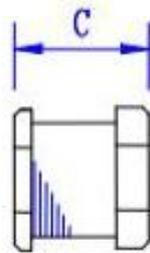
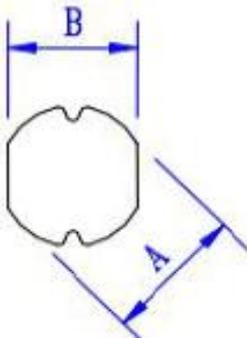


### Yint P/N Information

- ① PW ② D ③ 0315 ④ -100 ⑤ M ⑥ 0 ⑦ T
- ① Product series
  - ② Material
  - ③ Size
  - ④ Inductance
  - ⑤ Tolerance
  - ⑥ Special code
  - ⑦ Taping information

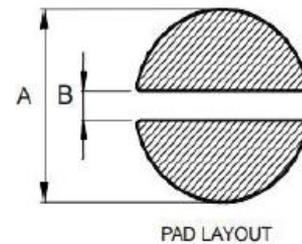
| ④ Nominal Inductance[ $\mu$ H] |                         |
|--------------------------------|-------------------------|
| Example                        | Nominal Value[ $\mu$ H] |
| R15                            | 0.15 $\mu$ H            |
| 1R0                            | 1.0 $\mu$ H             |
| 100                            | 10 $\mu$ H              |
| ⑤ Inductance Tolerance         |                         |
| M                              | $\pm$ 20%               |
| N                              | $\pm$ 30%               |

### Shape & Dimension information



Dimensions in mm

### Recommended Pattern



Dimensions in mm

| TYPE    | A             | B             | C             | D       |
|---------|---------------|---------------|---------------|---------|
| PWD0315 | 3.3 $\pm$ 0.3 | 3.0 $\pm$ 0.3 | 1.5 $\pm$ 0.3 | 1.0Typ. |

| TYPE    | A   | B   |
|---------|-----|-----|
| PWD0315 | 4.5 | 1.0 |

## PWD 0315 Series SMD Unshielded Power Inductor

**Specification**

| Yint P/N       | Inductance | DC Resistance | Saturation Current |
|----------------|------------|---------------|--------------------|
|                | L0 (μH)    | DCR (mΩ)      | Isat (A)           |
|                | 1MHz, 1V   | Max.          | Typ.               |
| PWD0315-2R2M0T | 2.2        | 0.013         | 0.79               |
| PWD0315-3R3M0T | 3.3        | 0.143         | 0.73               |
| PWD0315-4R7M0T | 4.7        | 0.195         | 0.65               |
| PWD0315-5R6M0T | 5.6        | 0.195         | 0.60               |
| PWD0315-6R8M0T | 6.8        | 0.26          | 0.57               |
| PWD0315-100M0T | 10         | 0.39          | 0.45               |
| PWD0315-150M0T | 15         | 0.754         | 0.30               |
| PWD0315-220M0T | 22         | 0.923         | 0.25               |
| PWD0315-330M0T | 33         | 1.43          | 0.20               |
| PWD0315-390M0T | 39         | 1.69          | 0.17               |
| PWD0315-470M0T | 47         | 1.69          | 0.17               |
| PWD0315-680M0T | 68         | 2.86          | 0.13               |
| PWD0315-101M0T | 100        | 4.55          | 0.10               |
| PWD0315-221M0T | 220        | 10.92         | 0.07               |

**Testing Conditions:**

- All test data is base on 25 °C ambient .  
Inductance measuring frequency:  $L \leq 10\mu\text{H}$  at 100KHz/0.25V,  $L > 10\mu\text{H}$  at 1KHz/0.25V.
- Operating temperature range - 40 °C to + 105 °C
- Isat(A): DC current will cause L0 to drop approximately 20 %
- The part temperature (ambient + temp rise) should not exceed 105 °C under worst cases.
- Storage Temperature: Under 25°C, Humidity < 65% RH.If product is preserved for more than 12 months, the solderability of their ter-minals may be deteriorated.

**Reel & QTY information**

| Series  | MPQ(Pcs) | Reel (mm) | W / P (mm) |
|---------|----------|-----------|------------|
| PWD0315 | 3,000    | 13"       | 12 / 8     |