

PMS 04XX Series Molding Power Inductor

Features

- Magnetic shielded structure.
- Ultra low DCR with super high DC current.
- Low loss and high efficiency with wider switching frequency operation.

Applications

- Notebooks, tablets.
- Telecom Base Station, Industrial Control Board, Motor Control and etc.
- Server, DC-DC power for FPGA and etc.



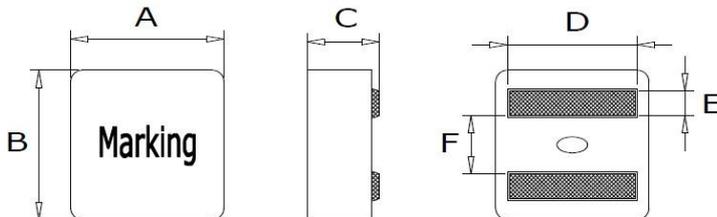
Yint P/N Information

- ① ② ③ ④ ⑤ ⑥ ⑦
 • PM S 0420 - R10 M 0 T

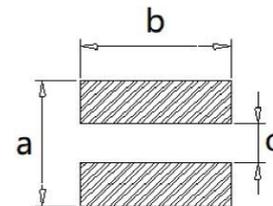
- ① Product series ⑤ Tolerance
② Material ⑥ Special code
③ Size ⑦ Taping information
④ Inductance

| ④ | | Nominal Inductance[μ H] |
|---------|--------------------------|------------------------------|
| Example | Nominal Value [μ H] | |
| R10 | 0.10 μ H | |
| 4R7 | 4.7 μ H | |
| 100 | 10 μ H | |
| ⑤ | | Inductance Tolerance |
| M | $\pm 20\%$ | |
| N | $\pm 30\%$ | |

Shape & Dimension information



<Recommend Land Pattern>



Unit: mm

| Series | Dimensions | | | | | | Land Pattern (Typ.) | | |
|---------|----------------|----------------|---------------|---------------|----------------|---------------|---------------------|-----|-----|
| | A | B | C | D | E | F | a | b | c |
| PMS0420 | 4.1 \pm 0.2 | 4.1 \pm 0.2 | 1.9 \pm 0.2 | 3.4 \pm 0.3 | 0.88 \pm 0.3 | 1.7 \pm 0.3 | 3.4 | 3.8 | 1.4 |
| PMS0430 | 4.1 \pm 0.25 | 4.1 \pm 0.25 | 2.8 \pm 0.2 | 3.4 \pm 0.3 | 0.88 \pm 0.3 | 1.7 \pm 0.3 | 3.4 | 3.8 | 1.4 |

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Specification information

| Yint P/N | Inductance | DC Resistance | Saturation Current | | Heating Rating Current | |
|----------------|--------------------|---------------|--------------------|------|------------------------|-----------|
| | L0 (μH) | DCR (mΩ) | Isat (A) | | Irms (A) | |
| | ±20 %, 100 kHz, 1V | Max. | Max. | Typ. | 20°C rise | 40°C rise |
| PMS0420-R10M0T | 0.10 | 2.42 | 33.0 | 38.0 | 13.5 | 18.0 |
| PMS0420-R22M0T | 0.22 | 4.60 | 18.8 | 19.5 | 13.0 | 16.8 |
| PMS0420-R36M0T | 0.36 | 6.30 | 15.0 | 17.0 | 11.0 | 14.5 |
| PMS0420-R40M0T | 0.40 | 7.73 | 13.5 | 15.5 | 10.0 | 14.0 |
| PMS0420-R47M0T | 0.47 | 8.58 | 13.0 | 14.5 | 9.0 | 12.5 |
| PMS0420-R56M0T | 0.56 | 9.30 | 12.6 | 14.0 | 8.5 | 12.0 |
| PMS0420-R60M0T | 0.60 | 9.52 | 12.3 | 13.7 | 8.0 | 11.7 |
| PMS0420-R72M0T | 0.72 | 11.6 | 10.6 | 12.0 | 7.6 | 10.5 |
| PMS0420-1R0M0T | 1.0 | 14.6 | 8.80 | 9.60 | 6.8 | 9.6 |
| PMS0420-1R2M0T | 1.2 | 17.9 | 7.80 | 9.00 | 6.6 | 9.0 |
| PMS0420-1R5M0T | 1.5 | 23.5 | 7.40 | 8.00 | 5.8 | 7.6 |
| PMS0420-1R8M0T | 1.8 | 28.0 | 7.00 | 7.50 | 5.2 | 7.0 |
| PMS0420-2R2M0T | 2.2 | 38.7 | 6.00 | 6.50 | 4.6 | 5.6 |
| - | - | - | - | - | - | - |
| PMS0430-R47M0T | 0.47 | 7.26 | 15.0 | 17.0 | 10.0 | 14.0 |
| PMS0430-R90M0T | 0.90 | 10.1 | 9.0 | 10.0 | 8.2 | 11.2 |
| PMS0430-1R0M0T | 1.0 | 10.1 | 9.2 | 9.8 | 8.0 | 11.0 |
| PMS0430-1R2M0T | 1.2 | 11.5 | 8.7 | 9.2 | 7.8 | 9.8 |
| PMS0430-1R5M0T | 1.5 | 13.2 | 7.0 | 8.0 | 7.0 | 9.0 |
| PMS0430-2R2M0T | 2.2 | 22.6 | 6.1 | 7.0 | 6.0 | 7.8 |
| PMS0430-3R3M0T | 3.3 | 28.6 | 5.3 | 6.2 | 5.0 | 6.6 |
| PMS0430-4R7M0T | 4.7 | 44.1 | 4.0 | 4.5 | 3.9 | 5.1 |
| PMS0430-6R8M0T | 6.8 | 74.1 | 3.0 | 3.6 | 3.0 | 3.9 |

Testing Conditions:

1. All test data is based on 25 °C ambient .
2. Operating temperature range - 55 °C to + 125 °C
3. Irms (A): DC current will cause an approximate ΔT of 40 °C based on 25 °C ambient temperature
4. Isat(A): DC current will cause L0 to drop approximately 30 %
5. The part temperature (ambient + temp rise) should not exceed 125 °C under worst cases.

Reel & QTY information

| Series | MPQ(Pcs) | Reel (W / P) |
|---------|----------|---------------|
| PMS0420 | 3,000 | 13" (12 / 8) |
| PMS0430 | 3,000 | 13" (12 / 8) |