

## PMS 06XX 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.



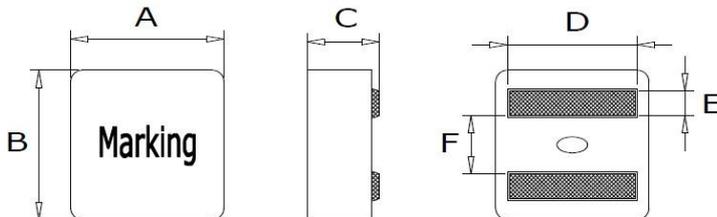
### Yint P/N Information

- ① PM   ② S   ③ 0630   ④ -R18   ⑤ M   ⑥ 0   ⑦ T

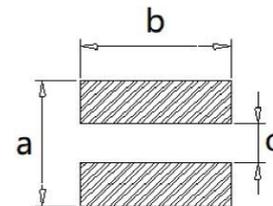
- ① Product series   ⑤ Tolerance  
 ② Material   ⑥ Special code  
 ③ Size   ⑦ Taping information  
 ④ Inductance

| ④       |                                 | Nominal Inductance[ $\mu\text{H}$ ] |
|---------|---------------------------------|-------------------------------------|
| Example | Nominal Value [ $\mu\text{H}$ ] |                                     |
| R18     | 0.18 $\mu\text{H}$              |                                     |
| 4R7     | 4.7 $\mu\text{H}$               |                                     |
| 100     | 10 $\mu\text{H}$                |                                     |
| 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   |
| PMS0630 | 6.6 $\pm$ 0.2 | 6.4 $\pm$ 0.2 | 2.8 $\pm$ 0.3 | 5.2Typ | 1.4 $\pm$ 0.3 | 2.6 $\pm$ 0.3 | 5.6                 | 5.6 | 2.5 |
| PMS0650 | 6.6 $\pm$ 0.2 | 6.4 $\pm$ 0.2 | 4.8 $\pm$ 0.3 | 5.2Typ | 1.4 $\pm$ 0.3 | 2.6 $\pm$ 0.3 | 5.6                 | 5.6 | 2.5 |
| PMS0660 | 6.6 $\pm$ 0.2 | 6.4 $\pm$ 0.2 | 5.8 $\pm$ 0.3 | 5.2Typ | 1.4 $\pm$ 0.3 | 2.6 $\pm$ 0.3 | 5.6                 | 5.6 | 2.5 |

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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)               |           |
|                | 100 kHz, 1V | Max.          | Max.               | Typ. | 20°C rise              | 40°C rise |
| PMS0630-R18M0T | 0.18        | 1.75          | 36                 | 40   | 24                     | 32        |
| PMS0630-R33M0T | 0.33        | 2.50          | 28                 | 32   | 20                     | 25        |
| PMS0630-R56M0T | 0.56        | 3.31          | 25                 | 29   | 17                     | 22        |
| PMS0630-R68M0T | 0.68        | 5.17          | 21                 | 25   | 15                     | 20        |
| PMS0630-1R0M0T | 1           | 6.05          | 18                 | 23   | 13                     | 18        |
| PMS0630-1R2M0T | 1.2         | 7.40          | 16                 | 22   | 12                     | 16        |
| PMS0630-1R5M0T | 1.5         | 9.13          | 15.5               | 20   | 11                     | 15        |
| PMS0630-1R8M0T | 1.8         | 10.2          | 13                 | 18.2 | 10                     | 14        |
| PMS0630-2R2M0T | 2.2         | 12.2          | 11                 | 15.9 | 7                      | 10        |
| PMS0630-3R3M0T | 3.3         | 20.8          | 9                  | 12.2 | 6                      | 8         |
| PMS0630-4R5M0T | 4.5         | 25.3          | 8                  | 10   | 5                      | 7         |
| -              | -           | -             | -                  | -    | -                      | -         |
| PMS0650-R82M0T | 0.82        | 4.18          | 20                 | 24   | 16                     | 21        |
| PMS0650-1R0M0T | 1           | 4.52          | 18                 | 23   | 15                     | 20        |
| PMS0650-1R2M0T | 1.2         | 5.83          | 16                 | 22   | 14                     | 18        |
| PMS0650-1R5M0T | 1.5         | 6.3           | 14.5               | 19.5 | 13                     | 17        |
| PMS0650-1R8M1T | 1.8         | 7.1           | 13.5               | 18.5 | 12                     | 16        |
| PMS0650-2R2M1T | 2.2         | 8.5           | 12                 | 16   | 10                     | 13        |
| PMS0650-3R3M1T | 3.3         | 12.5          | 10                 | 12.5 | 8.5                    | 11        |
| PMS0650-4R3M1T | 4.3         | 16.2          | 8.5                | 11   | 7                      | 9         |
| PMS0650-4R7M1T | 4.7         | 18.4          | 8                  | 10.5 | 6.5                    | 8.5       |
| -              | -           | -             | -                  | -    | -                      | -         |
| PMS0660-1R0M0T | 1           | 4.4           | 19                 | 24   | 16                     | 21        |
| PMS0660-1R5M0T | 1.5         | 6.1           | 15                 | 20   | 13.5                   | 17.5      |
| PMS0660-2R2M0T | 2.2         | 8.1           | 12.5               | 16.5 | 11                     | 14        |
| PMS0660-3R3M0T | 3.3         | 12.3          | 11                 | 13   | 9                      | 12        |
| PMS0660-4R7M0T | 4.7         | 14.4          | 9.3                | 10.5 | 8.5                    | 11        |
| PMS0660-5R6M0T | 5.6         | 15.9          | 8.7                | 9.9  | 7.6                    | 10        |
| PMS0660-6R8M0T | 6.8         | 20.8          | 8.1                | 9.2  | 7                      | 9         |
| PMS0660-8R2M0T | 8.2         | 26.4          | 8                  | 8.4  | 6                      | 8         |
| PMS0660-100M0T | 10          | 29.82         | 6.8                | 7.6  | 5                      | 7         |
| PMS0660-150M0T | 15          | 43.75         | 5                  | 5.8  | 4.5                    | 6         |
| PMS0660-220M0T | 22          | 60.63         | 4.8                | 5.6  | 3.8                    | 5         |
| -              | -           | -             | -                  | -    | -                      | -         |

## PMS 06XX Series Molding Power Inductor

### Testing Conditions:

1. All test data is based on 25 °C ambient .
2. Operating temperature range - 55 °C to + 125 °C
3. I<sub>rms</sub> (A): DC current will cause an approximate  $\Delta T$  of 40 °C based on 25 °C ambient temperature
4. I<sub>sat</sub>(A): DC current will cause L<sub>0</sub> to drop approximately 30 %
5. The part temperature (ambient + temp rise) should not exceed 125 °C under worst cases.
6. Storage Temperature: Under 25 °C, Humidity < 65% RH. If product is preserved for more than 6 months, the solderability of their terminals may be deteriorated.

### Reel & QTY information

| Series  | MPQ(Pcs) | Reel (W / P)   |
|---------|----------|----------------|
| PMS0630 | 1,000    | 13" ( 16 / 12) |
| PMS0650 | 800      | 13" ( 16 / 12) |
| PMS0660 | 750      | 13" ( 16 / 12) |