

# PMS 05XX 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.



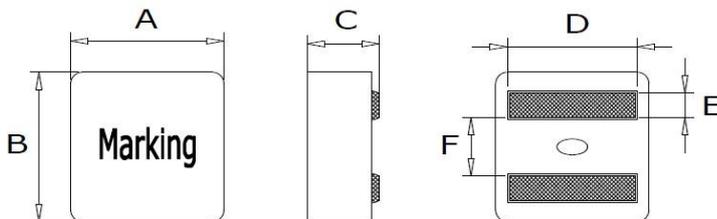
## Yint P/N Information

- ① PM ② S ③ 0520 - R15 ④ M ⑤ 0 ⑥ T

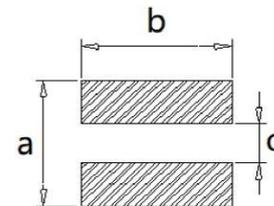
- ① Product series      ⑤ Tolerance  
 ② Material              ⑥ Special code  
 ③ Size                    ⑦ Taping information  
 ④ Inductance

④ Nominal Inductance[ $\mu\text{H}$ ]	
Example	Nominal Value [ $\mu\text{H}$ ]
R15	0.15 $\mu\text{H}$
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
PMS0520	5.5 $\pm$ 0.2	5.3 $\pm$ 0.2	1.9 $\pm$ 0.2	4.3 $\pm$ 0.3	1.1 $\pm$ 0.3	2.3 $\pm$ 0.3	4.5	4.7	2.0
PMS0530	5.5 $\pm$ 0.2	5.3 $\pm$ 0.2	2.9 $\pm$ 0.2	4.3 $\pm$ 0.3	1.1 $\pm$ 0.3	2.3 $\pm$ 0.3	4.5	4.7	2.0
PMS0550	5.5 $\pm$ 0.2	5.3 $\pm$ 0.2	4.8 $\pm$ 0.2	4.3 $\pm$ 0.3	1.1 $\pm$ 0.3	2.3 $\pm$ 0.3	4.5	4.7	2.0

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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
PMS0520-R15M0T	0.15	4.6	27.0	30.0	13.9	18.8
PMS0520-R16M0T	0.16	4.6	27.0	30.0	13.9	18.8
PMS0520-R33M0T	0.33	7.0	24.0	26.0	10.5	14.4
PMS0520-R47M0T	0.47	8.05	20.0	22.0	10.1	14.1
PMS0520-R56M0T	0.56	9.54	16.0	19.0	9.9	13.9
PMS0520-R68M0T	0.68	10.2	14.0	16.0	9.6	13.4
PMS0520-R80M0T	0.8	11.8	13.5	15.5	9.4	13.0
PMS0520-R82M0T	0.82	12.7	13.0	15.0	8.5	12.0
PMS0520-1R0M0T	1	13.8	12.8	14.5	7.5	10.5
PMS0520-1R2M0T	1.2	16.3	12.2	14.0	6.8	9.4
PMS0520-1R5M0T	1.5	18.7	11.7	13.3	6.4	8.8
-	-	-	-	-	-	-
PMS0530-R15M0T	0.15	2.31	32.5	36.0	14.3	22.2
PMS0530-R16M0T	0.16	2.33	32.0	35.0	14.2	22.2
PMS0530-R33M0T	0.33	3.52	26.0	28.0	13.8	19.2
PMS0530-R47M0T	0.47	4.13	24.0	26.0	13.7	18.4
PMS0530-R56M0T	0.56	4.52	20.2	22.2	13.6	17.7
PMS0530-R60M0T	0.6	4.52	20.0	22.0	13.6	17.7
PMS0530-R80M0T	0.8	5.65	18.0	20.0	10.1	13.1
PMS0530-R82M0T	0.82	5.78	17.6	19.7	9.9	12.9
PMS0530-1R0M0T	1	7.6	14.3	16.5	9.0	12.2
PMS0530-1R2M0T	1.2	9.7	13.5	15.0	8.5	11.0
PMS0530-1R5M0T	1.5	11.2	12.5	14.0	8.0	10.5
PMS0530-1R8M0T	1.8	12.7	11.3	12.3	7.6	10.1
PMS0530-2R2M0T	2.2	14.5	9.0	10	7.2	9.7
PMS0530-3R3M0T	3.3	23.1	8.7	9.5	5.9	8.1
PMS0530-4R7M0T	4.7	36.3	7.0	8.2	4.3	5.9
-	-	-	-	-	-	-
PMS0550-5R6M0T	5.6	24.2	7.2	8.6	5.3	7.2
PMS0550-6R8M0T	6.8	28.6	6.6	7.8	4.8	6.4
PMS0550-8R2M0T	8.2	32.5	6.1	7.2	4.6	6.1
PMS0550-100M0T	10	43.0	5.4	6.5	3.8	5.0
PMS0550-150M0T	15	76.7	3.2	3.7	3	3.9
PMS0550-220M0T	22	99.65	3.0	3.6	2.5	3.4

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### 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)
PMS0520	3,000	13" ( 12 / 8)
PMS0530	2,000	13" ( 16 / 8)
PMS0550	1,500	13" ( 16 / 8)