

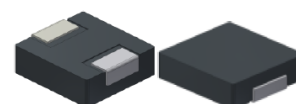
# Molding Power Inductors

THMPI070605 Series

TOP-EMC

## Features

- Shielded construction
- Low loss realized with low DCR
- High performance (Isat) realized by metal dust core.
- Ultra low buzz noise, due to composite construction.
- RoHS, Halogen Free and REACH Compliance
- High reliability -Reliability tests comply with AEC-Q200



## Applications

- Electric Power Steering
- ABS Control Units
- Battery powered devices
- Car Navigation Systems
- Meters/Alarms
- Car distance Control Units

## Product Identification

THMPI                      070605                      D                      4R7                      M                      T  
①                                      ②                                      ③                                      ④                                      ⑤                                      ⑥

- ① Type : THMPI
- ② External Dimensions (L×W×H) [mm]= 070605
- ③ Feature Type: Differential
- ④ Nominal Inductance : 4R7=4.7uH
- ⑤ Inductance Tolerance : K=±10%  
M=±20%  
N=±30%
- ⑥ Packing T= Tape Carrier Package

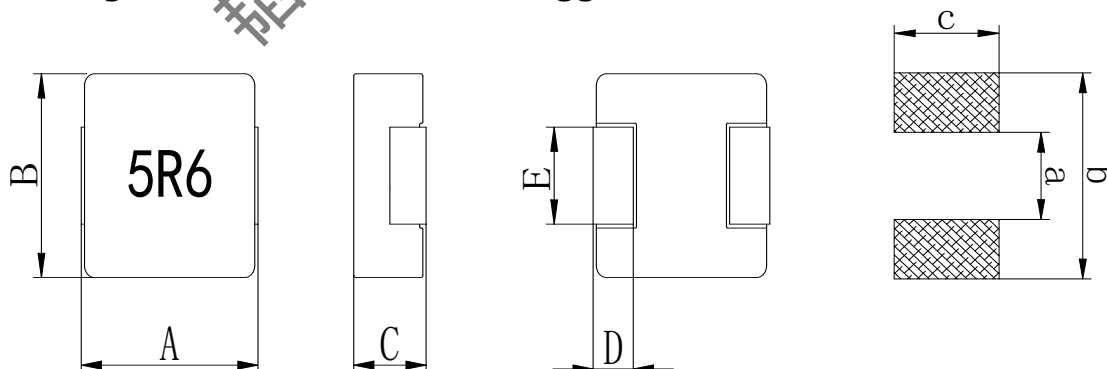
## Specifications

Part No.	Inductance	DC Resistance	Heating Rating Current	Saturation Current
	L0 (μH)	DCR (mΩ)	Idc (A)	Isat (A)
	±20 %, 100 kHz, 1V	MAX.	TYP.	TYP.
THMPI070605DR47MT	0.47	3.9	20	21
THMPI070605DR68MT	0.68	4.5	16.5	18
THMPI070605D1R0MT	1.0	6.6	12	16
THMPI070605D1R5MT	1.5	10	9.5	13
THMPI070605D2R2MT	2.2	12.5	9	11
THMPI070605D3R3MT	3.3	22	8.5	10
THMPI070605D4R7MT	4.7	29	6	8
THMPI070605D5R6MT	5.6	34.4	6	7
THMPI070605D6R8MT	6.8	41	5.8	6.3
THMPI070605D8R2MT	8.2	48	5.5	5.5
THMPI070605D100MT	10	60	4.5	5.3
THMPI070605D150MT	15	90	3.1	4
THMPI070605D220MT	22	140	2.6	3.5
THMPI070605D330MT	33	190	2.3	3
THMPI070605D470MT	47	230	2	2.6

### Notes

1. All test data is referenced to 25 °C ambient
2. Operating temperature range - 55 °C to + 125 °C
3. Idc(A):DC current (A) that will cause an approximate ΔT of 40 °C(reference ambient temperature is 25°C)
4. Isat(A):DC current (A) that will cause L0 to drop approximately 30 %

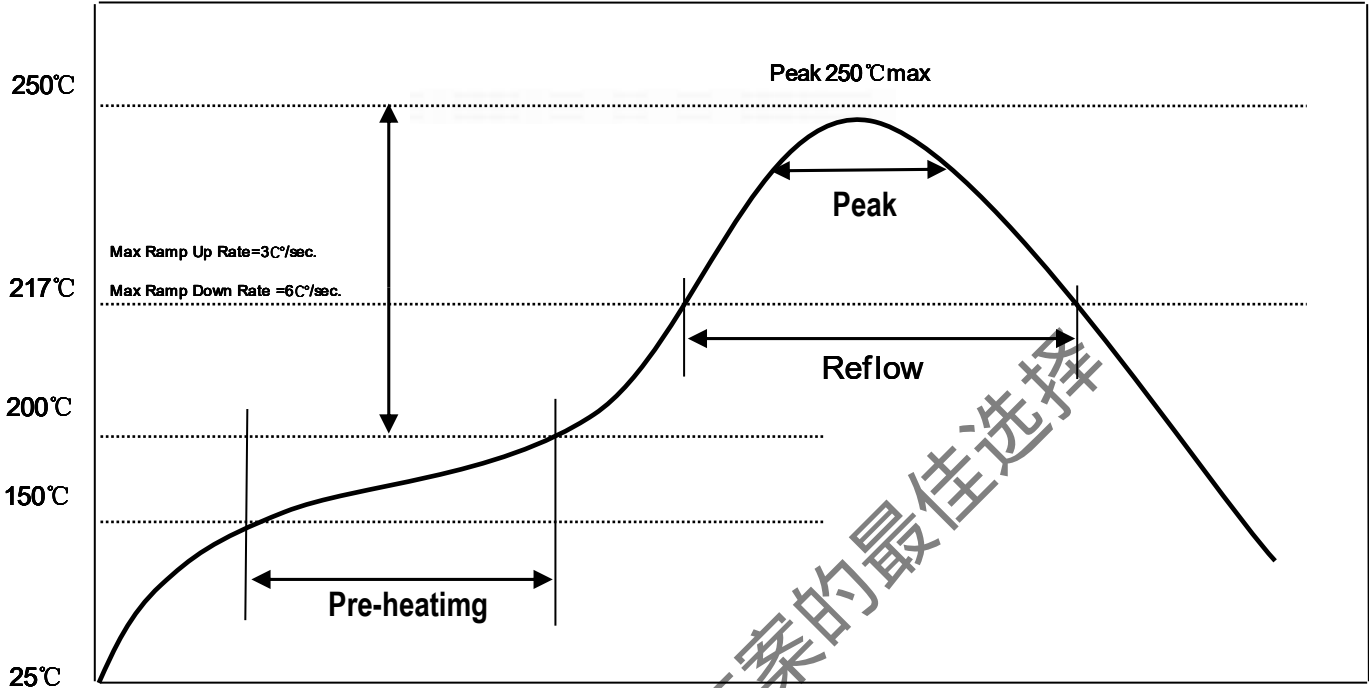
### Package Mechanical Data And Suggested Land Pattern



A	B	C	D	E	a	b	c
7.0 ± 0.3	6.6 ± 0.2	4.8 ± 0.2	1.6 ± 0.3	3.0 ± 0.3	3.7Ref	8.4Ref	3.5Ref

unit :mm

## Recommended Soldering Technologies



Item.	Ramp-up	Preheating	Reflow	Peak Temp	Cooling
Temp.scope	R.T.~150°C	150°C~200°C	217°C	260±5°C	Peak Temp.~150°C
Time spec	——	60~180sec	60~150sec	20~40sec	——
Time result	——	60~95sec	75~95sec	20~35sec	——

### Note:

- 1.Re-flow possible times:within 2 times
- 2.Nitrogen adopted is recommended while in re-flow

The reflow profile in the above table is only for qualification and is not meant to specify board assembly profiles. Actual board assembly profiles must be based on the customer's specific board design, solder paste and process, and should not exceed the parameters as the Reflow profile shows.

## CONTACT INFORMATION

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