

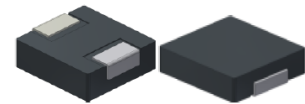
Molding Power Inductors

THMPI111004 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 111004 D 8R2 M T
① ② ③ ④ ⑤ ⑥

- ① Type : THMPI
- ② External Dimensions (L×W×H) [mm]= 111004
- ③ Feature Type: Differential
- ④ Nominal Inductance : 8R2=8.2μH
- ⑤ Inductance Tolerance : K=±10%
M=±20%
N=±30%
- ⑥ Packing T=Tape Carrier Package

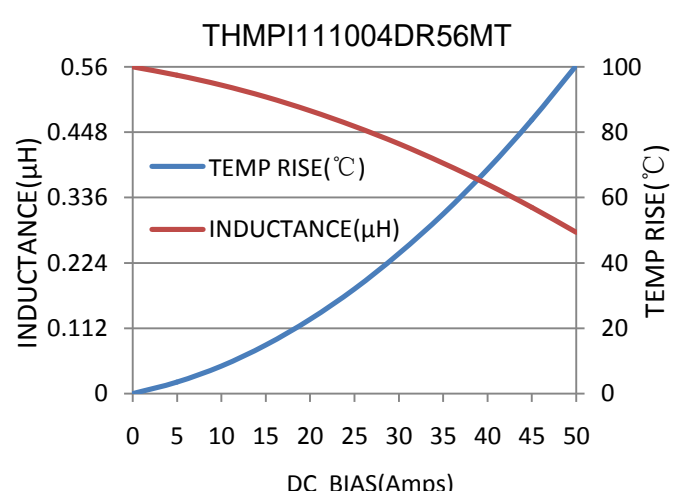
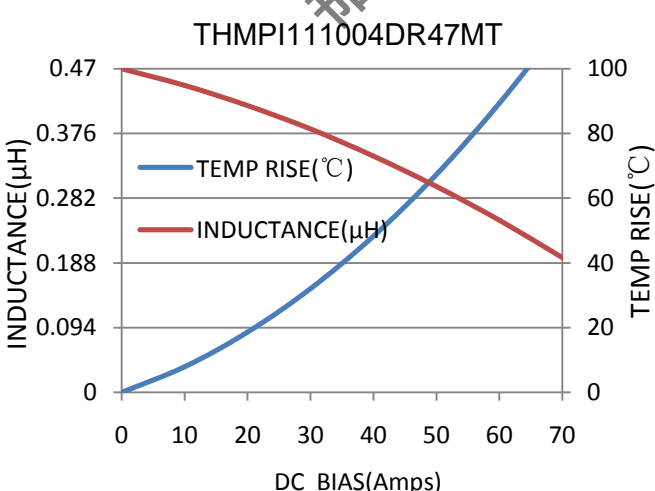
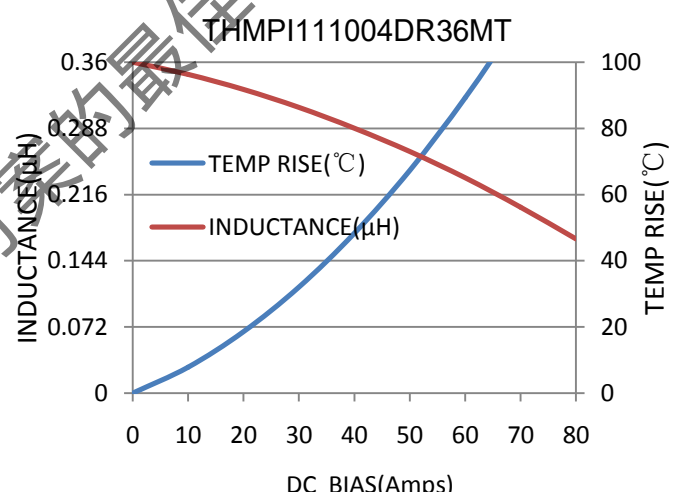
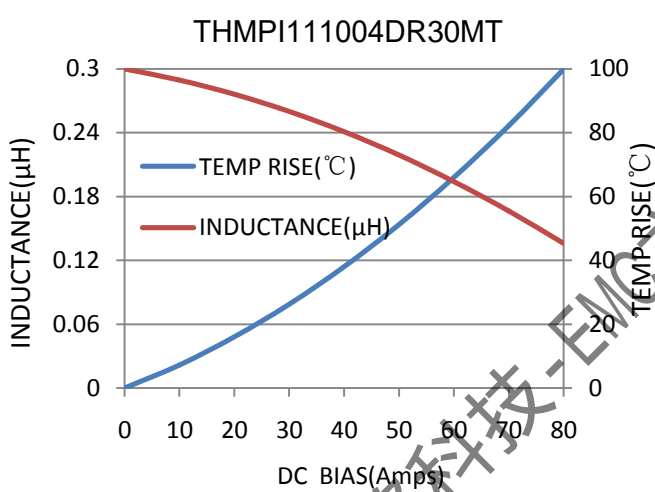
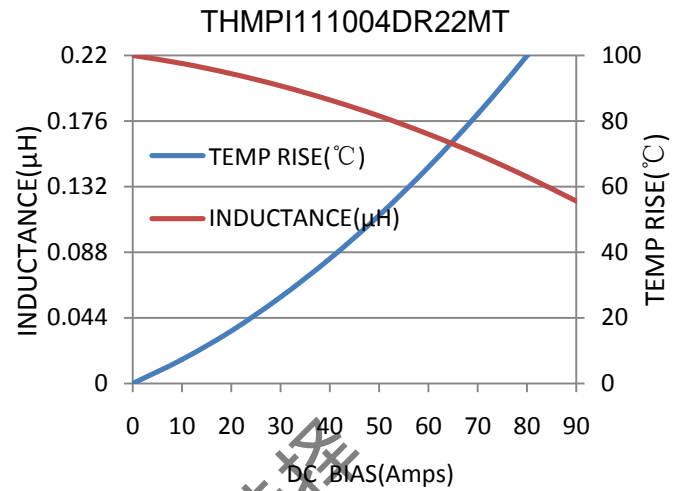
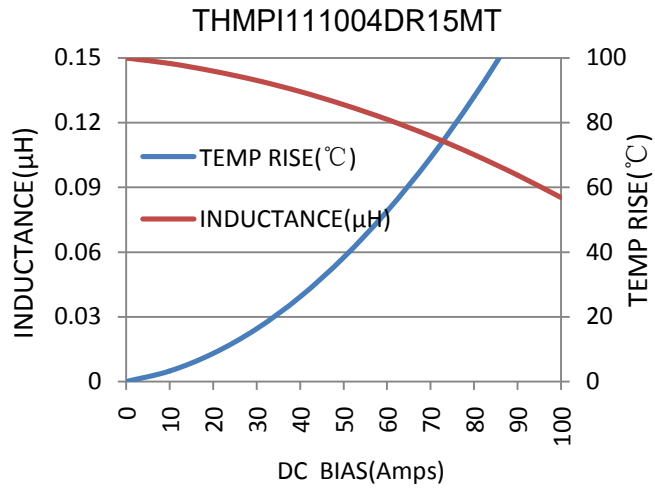
SPECIFICATIONS

Part No.	Inductance	DC Resistance		Heating Rating Current	Saturation Current
	L0 (μH)	DCR (mΩ)		Idc (A)	Isat (A)
	±20 %, 100 kHz, 1V	TYP.	MAX.	TYP.	TYP.
THMPI111004DR15MT	0.15	0.5	0.65	45.0	75.0
THMPI111004DR22MT	0.22	0.9	1.0	35.0	60.0
THMPI111004DR30MT	0.30	0.95	1.1	35.0	50.0
THMPI111004DR36MT	0.36	1.05	1.2	30.0	50.0
THMPI111004DR47MT	0.47	1.5	1.7	30.0	40.0
THMPI111004DR56MT	0.56	1.6	1.8	25.0	33.0
THMPI111004DR68MT	0.68	2.1	2.4	23.0	30.0
THMPI111004DR80MT	0.80	2.6	2.7	23.0	29.0
THMPI111004D1R0MT	1.0	3.0	3.3	19.0	28.0
THMPI111004D1R5MT	1.5	3.8	4.2	16.0	26.0
THMPI111004D2R2MT	2.2	6.0	7.0	12.0	18.0
THMPI111004D3R3MT	3.3	10.0	11.8	11.0	16.0
THMPI111004D4R7MT	4.7	17.0	20.0	9.0	15.0
THMPI111004D6R8MT	6.8	22.0	25.0	8.5	12.0
THMPI111004D8R2MT	8.2	25.0	27.0	8.0	9.0
THMPI111004D100MT	10.0	27.0	30.0	7.8	8.5
THMPI111004D150MT	15.0	40.0	45.0	6.5	7.0
THMPI111004D220MT	22.0	58.0	66.0	5.0	5.5
THMPI111004D330MT	33.0	85.0	92.0	4.4	5.0
THMPI111004D470MT	47.0	130.0	145.0	3.3	3.5
THMPI111004D680MT	68.0	178.0	195.0	2.5	3.0
THMPI111004D101MT	100	315.0	350.0	2.2	2.3

Notes

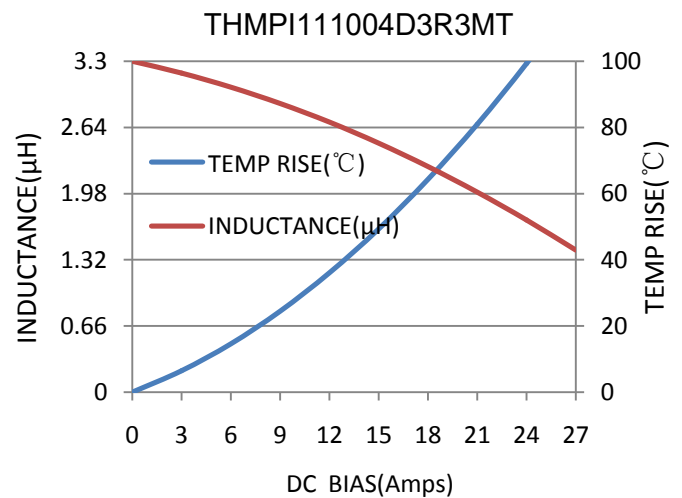
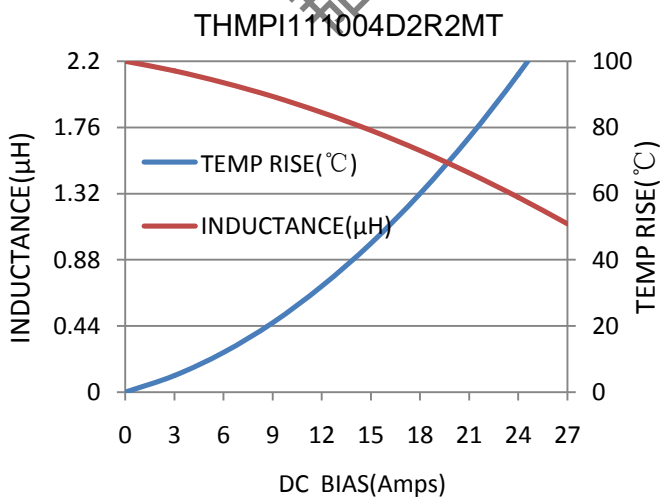
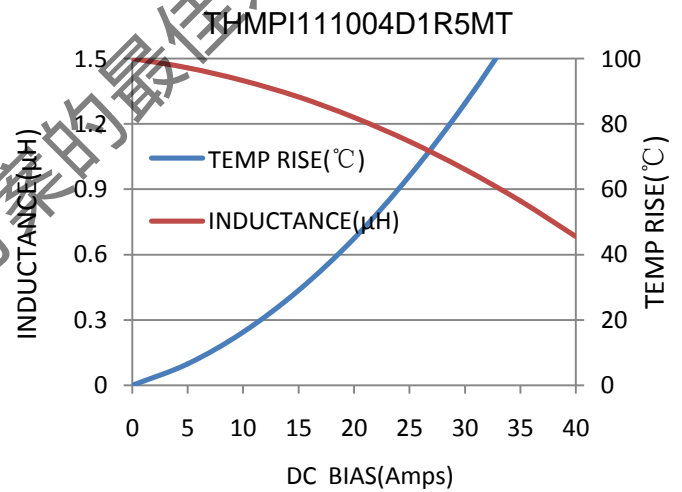
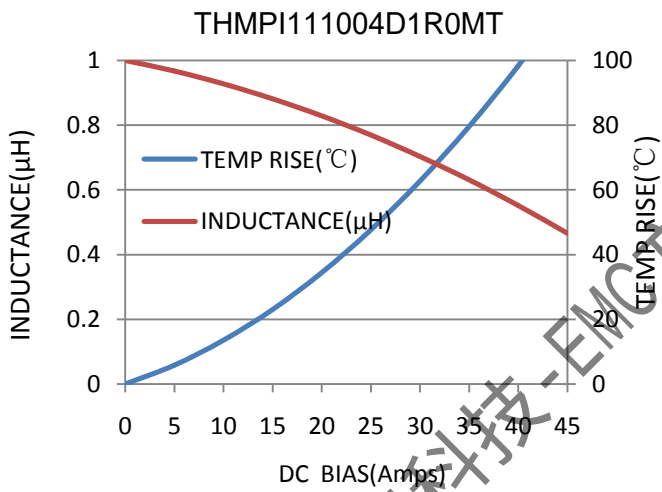
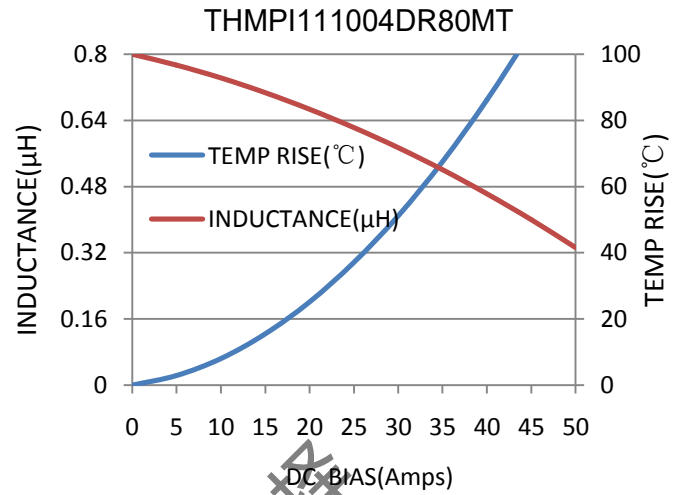
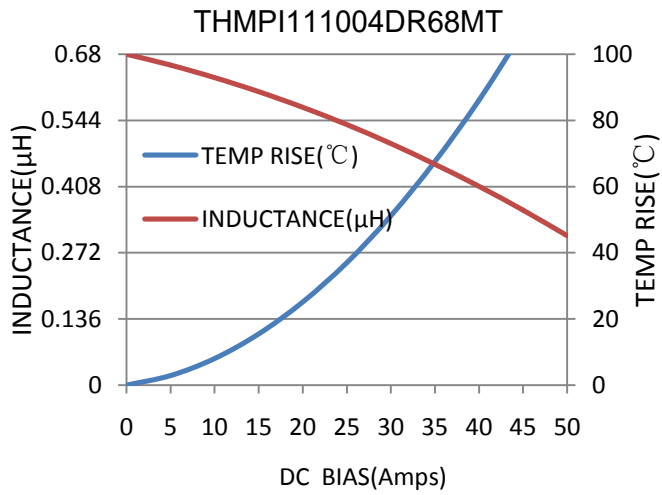
1. All test data is referenced to 25 °C ambient
2. Operating temperature range - 55 °C to + 125 °C
3. Idc(A):DC current (A) that will cause an approximate ΔT of 40 °C(reference ambient temperature is 25°C)
4. Isat(A):DC current (A) that will cause L0 to drop approximately 30 %
5. The part temperature (ambient + temp rise) should not exceed 125 °C under worst case operating conditions.
Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

Graph

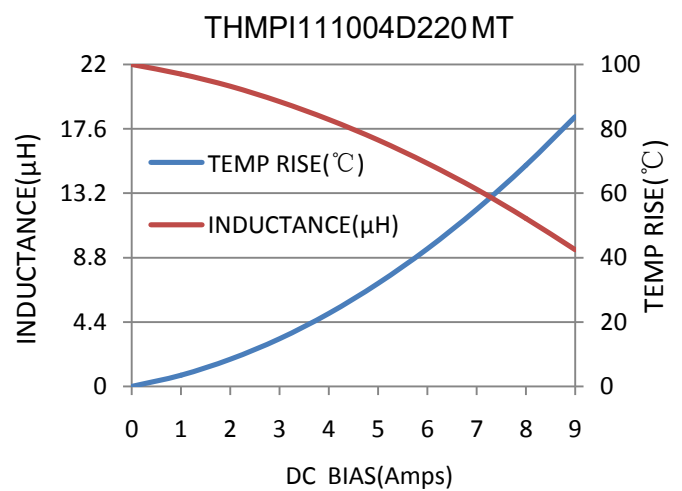
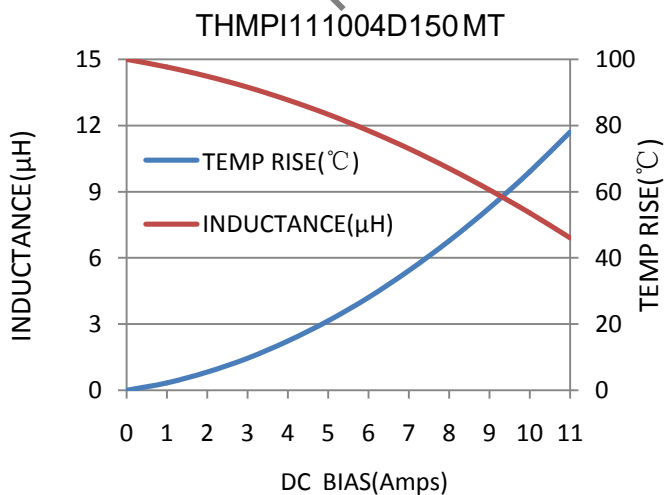
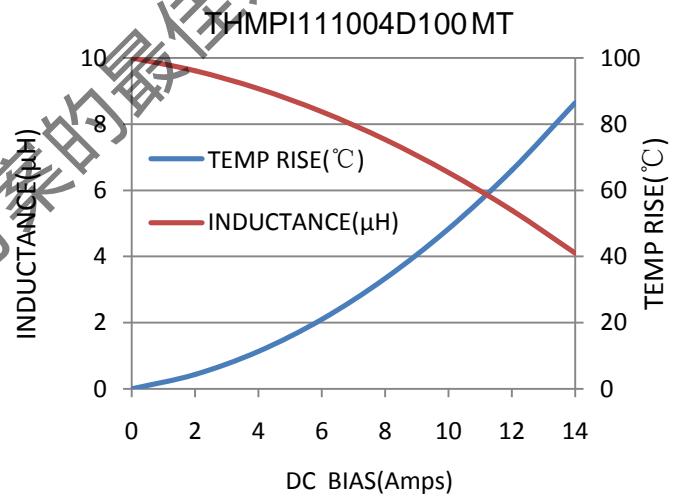
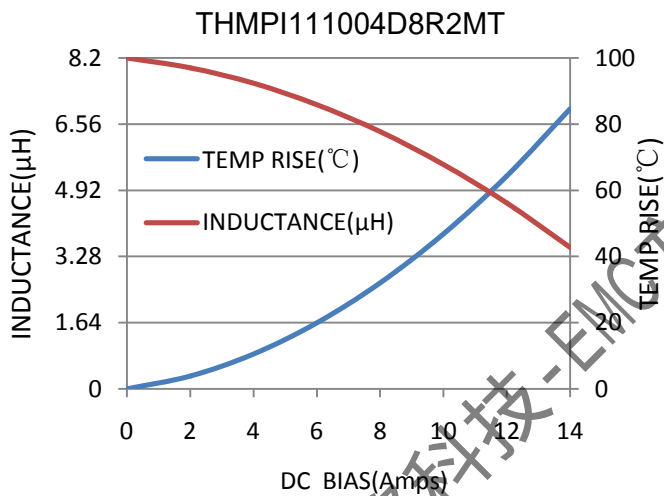
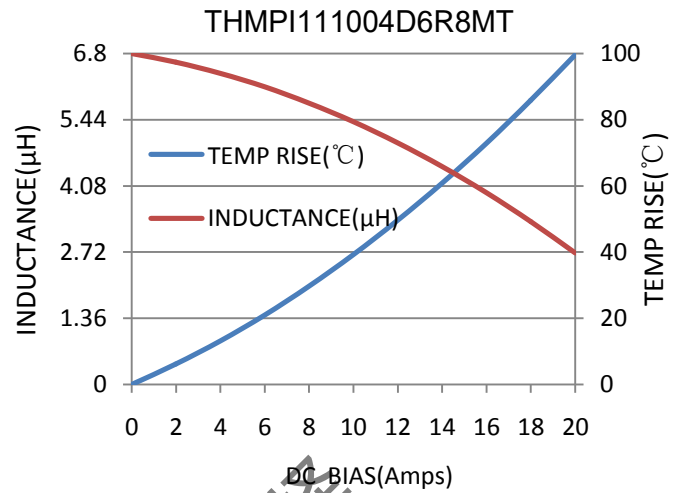
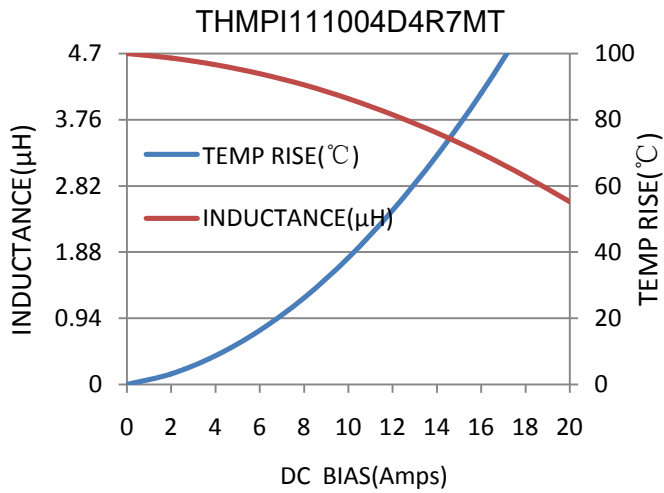


超晶科技-EMC方案的最佳选择

Graph

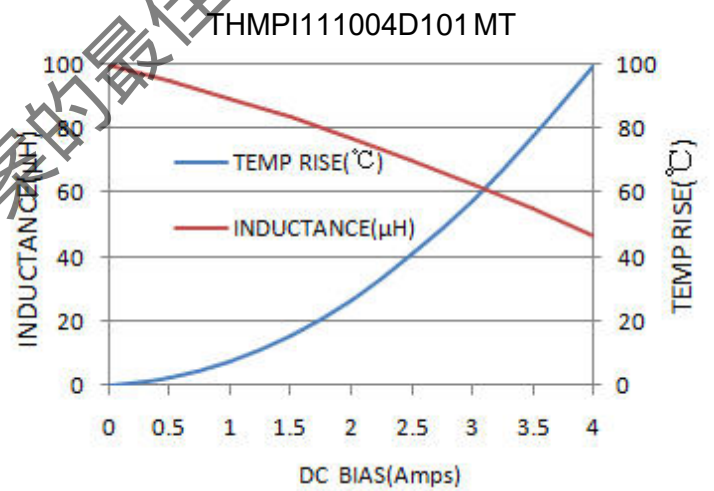
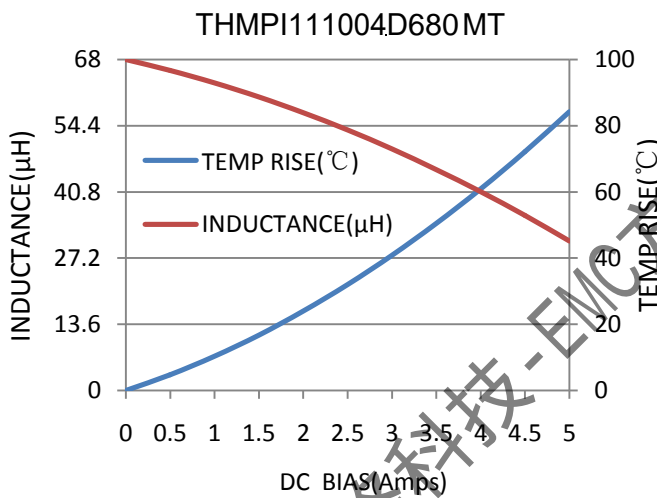
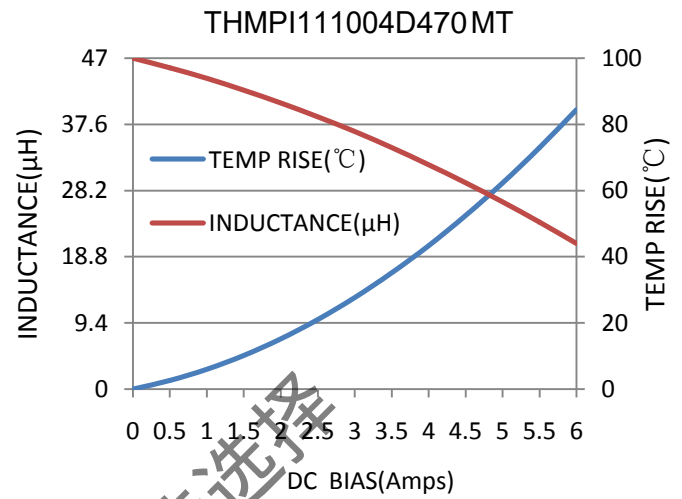
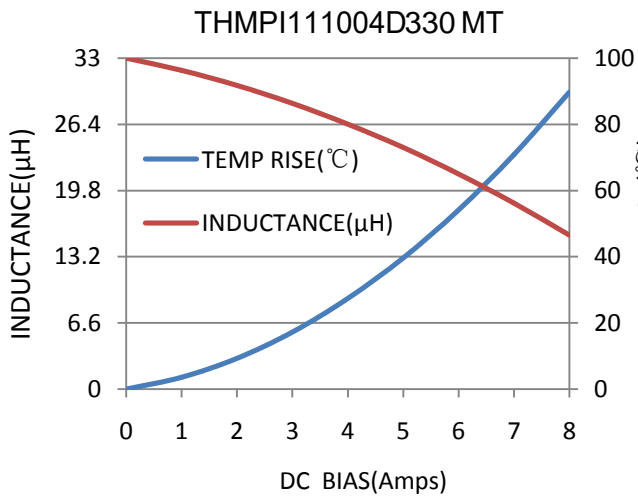


Graph



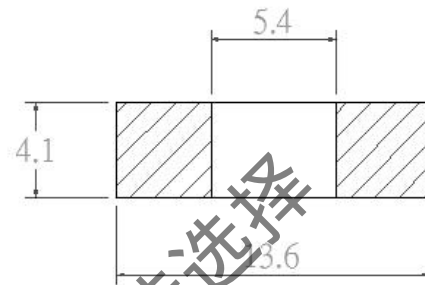
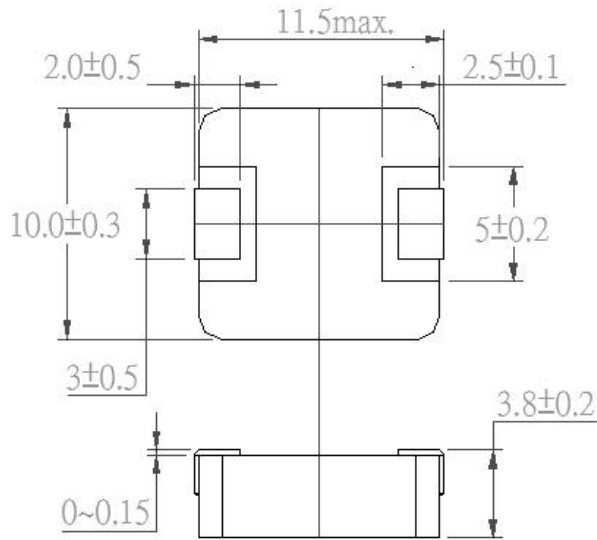
超磁科技-EMC厂家的最佳选择

Graph



超昇科技-EMC行家最佳选择

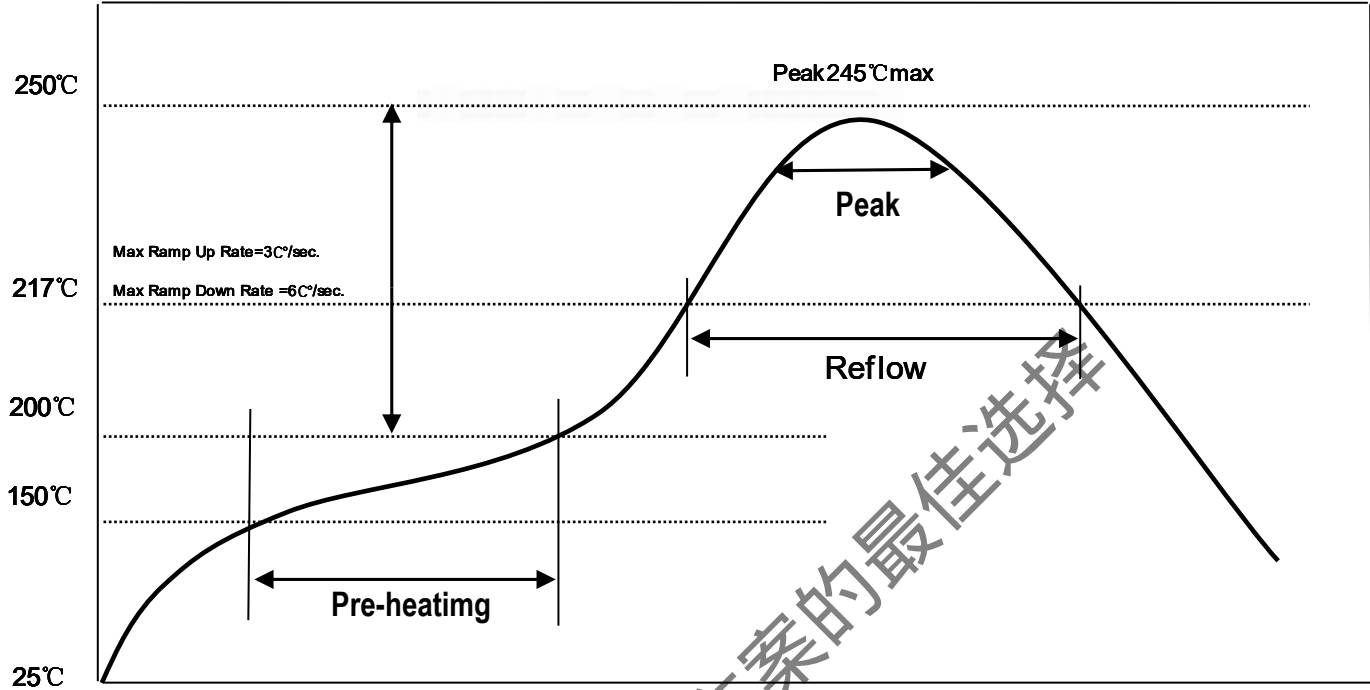
Configuration and Dimensions : (Dimensions in mm)



Recommend Land Pattern Dimensions

韬略科技-EMC方案的最佳选择

RECOMMENDED SOLDERING TECHNOLOGIES



Item.	Ramp-up	Preheating	Reflow	Peak Temp	Cooling
Temp.scope	R.T.~150°C	150°C~200°C	217°C	245±5°C	Peak Temp.~150°C
Time spec	——	60~180 sec	60~150sec	20~40sec	——
Time result	——	70~95 sec	70~95sec	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

SHENZHEN TOP-FLIGHT TECHNOLOGY CO.,LTD

4th Floor, C Building, Quansen Industrial Park , Bulong Road, Longhua New District, Shenzhen

Tel: 86-755-82908191 Fax: 86-755-82908701 Email:kang@topleve.com

Website: <http://www.topleve.com>