深圳市磁立方科技有限公司
ShenZhen Magnetic Cube Technology Co., LTD.

TSMC SERIES

DESCRIPTION

- AEC-Q200 qualified
- Halogen Free
- 155°C maximum total temperature operation
- 11.15x10.3x 8.0mm maximum surface mount package
- Powder alloy core material
- Magnetically shielded, low EMI
- High current carrying capacity, Low core losses
- RoHS compliant

Part numbering system

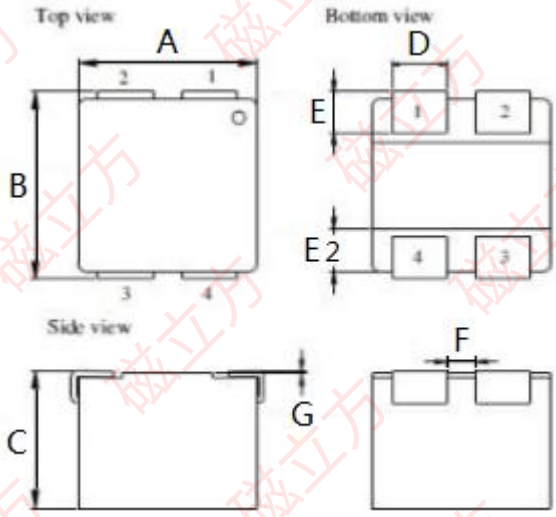
TSMC 1080 - XXX M

(1) (2) (3) (4)

(1)Product Series (2)Dimension Size

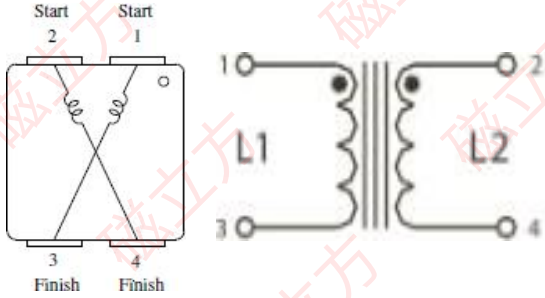
(3)Inductance (L@0A):150=15.0uH (4)Inductance Tolerance: M= ±20%

Mechanical Dimensions

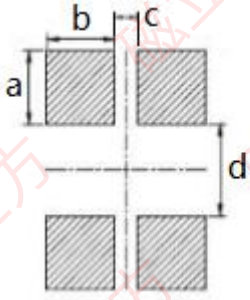


A	10.0±0.3
B	10.8±0.35
C	8.0 Max
D	3.1±0.3
E	2.4±0.5
E2	2.5±0.2
F	1.6±0.2
G	0--0.15

Schematics



Recommended pcb layout



unit: mm

a	4.0
b	3.8
c	1.2
d	5.0

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Mechanical Dimensions

系列 \ 尺寸	A	B	C	D	E	Packing (Pcs/Reel)
TSMC1080	10±0.3	10.8±0.35	8.0 Max	3.1±0.3	2.4±0.5	**400**

Electrical Characteristics: Test condition：at 25oC：100KHz/1.0V

PART NO.	L(0A) (uH±20%)	Irms (Amperes)	Isat (Amperes)	DCR (mΩ)TYPE	DCR (mΩ)MAX	REMARKS
TSMC1080-100M	10.0	5.4	14.0	35.0	40.0	
TSMC1080-150M	15.0	5.0	12.5	39.0	46.8	
TSMC1080-220M	22.0	3.85	7.48	72.0	90.0	

Notes:

◎ All test Data is referenced to 25℃ ambient. Inductance (L_0) Test Parameters:100KHz,1.0V,Idc=0.0A.

◎ Operating temperature range: -35℃ to 125℃.

◎ Irms: Typical Heat Rating DC Current would cause an approximately △T of 40℃.

◎ Isat: Typical Saturation DC Current would cause Lo to drop approximately 30%.

◎ The Part temperature (ambient + △T) should not exceed 125℃ under worst case operating conditions.

◎ Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all effect the part temperature. Part temperature should be verified in the end application.

备注：上表中未列出的型号规格，请电话联系我们咨询。

Note: unlisted model specifications in the above table, please contact us by telephone.

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Inductance & temperature rise vs Idc