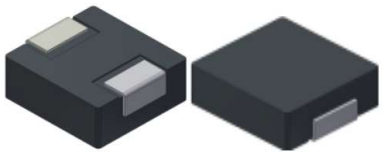
Molding Power Inductors -MCH Series

INCMCOIL
欣腾辉电子
XINTENGHUI ELECTRONICS

MCH Series



Description:

·RoHS,Halogen Free and REACH Compliance
·High current carrying capacity,Low core losses
·Carbon-based magnetic core material
·Frequency range up to 5MHZ.
·Magnetically shielded, low EMI

Applications:

·Switchs and servers
·SSD modules
·Notebook regulators
·Battery power systems
·DC/DC converters

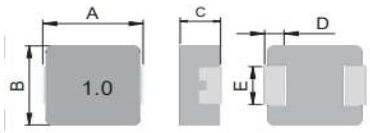
Product Identification

MCH □□□□ □ □□□ □

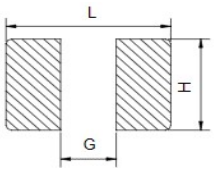
- Tolerance: T:±30%, M:±20%
- Inductance Value
- Product Type: S: standard ,H:high currrent ,L: low DCR
- Dimensions
- Product Series

Dimensions-mm

Shape and Dimensions



Recommended Pad Layout



Dimensions-mm

TYPE	A	B	C	D	E
0640	7.3±0.3	6.6±0.3	3.8±0.2	1.8±0.3	3.0±0.3

Dimensions-mm

TYPE	L	G	H
0640	8.4	2.5	3.5

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Electrical Characteristics

Part No.	Inductance (uH)	Tolerance (±%)	Test Freq.	RDC(mΩ) Typ.	RDC(mΩ) Max.	Isat(A) Typ.	Isat(A) Max.	Irms(A) Typ.	Irms(A) Max.
MCH0640SR12T	0.12	30	100KHZ,1V	0.7	1.0	64.0	/	32.0	/
MCH0640SR15T	0.15	30	100KHZ,1V	0.9	1.2	55.0	51.00	30.0	28.00
MCH0640SR22M	0.22	20	100KHZ,1V	1.85	2.1	37.0	34.00	28.0	25.00
MCH0640SR36M	0.36	20	100KHZ,1V	2	2.6	34.0	31.00	26.0	23.00
MCH0640SR33M	0.33	20	100KHZ,1V	2.7	3.1	31.0	29.00	25.0	22.00
MCH0640SR47M	0.47	20	100KHZ,1V	3	3.4	28.0	26.00	23.0	20.00
MCH0640SR56M	0.56	20	100KHZ,1V	3.8	4.3	26.0	24.00	20.0	18.00
MCH0640SR68M	0.68	20	100KHZ,1V	4.1	4.5	24.0	22.00	16.0	14.00
MCH0640SR82M	0.82	20	100KHZ,1V	5.5	6.3	23.0	20.0	15.0	13.0
MCH0640S1R0M	1.00	20	100KHZ,1V	6.8	8.0	22.0	19.0	14.0	12.0
MCH0640S1R5M	1.50	20	100KHZ,1V	10.0	12.0	20.0	18.0	12.0	10.0
MCH0640S2R2M	2.20	20	100KHZ,1V	11.5	14.0	14.0	13.0	9.0	8.5
MCH0640S3R3M	3.30	20	100KHZ,1V	24.0	27.0	12.0	11.0	8.0	7.5
MCH0640S4R7M	4.70	20	100KHZ,1V	28.0	32.5	11.0	10.0	6.0	5.5
MCH0640S5R6M	5.60	20	100KHZ,1V	33.0	38.0	9.0	8.5	5.0	4.5
MCH0640S6R8M	6.80	20	100KHZ,1V	44.0	50.0	8.5	8.0	4.5	4.3
MCH0640S8R2M	8.20	20	100KHZ,1V	55.0	64.0	8.0	7.5	4.5	4.0
MCH0640S100M	10.00	20	100KHZ,1V	64.0	72.0	7.0	6.5	4.0	3.7
MCH0640S150M	15	20	100KHZ,1V	80.0	90.0	3.5	3.5	3.0	2.8
MCH0640S220M	22	20	100KHZ,1V	120.0	145.0	3.5	3.0	2.5	2.0
MCH0640S330M	33	20	100KHZ,1V	180.0	210.0	3.2	2.6	1.8	1.5

Notes:

1.All test data is referenced to 25°C ambient.
2.Operating temperature range -55℃ to +125℃ (Including self - temperature rise)
3.Irms(A):DC current(A) that will cause an approximate △T of 40℃
(reference ambient temperature is 25℃)
4.Isat(A):DC current(A) that will cause L0 to drop approximately 30%.
5. Measure Equipment：
L：Wayne kerr 3260B/G LCR Meter (or equivalent), 100KHz 1.0V
RDC：CHEN HWA502BC/HP4338B (or equivalent)
Isat：Wayne kerr 3265B Bias Current Source (or equivalent)
Irms：Wayne kerr 3265B Bias Current Source (or equivalent)
6.Test Condition:
Temperature:26±3℃
Humidity:<70% RH
Frequency:100KHz 1.0V
7.Absolute maximum voltage 50VDC

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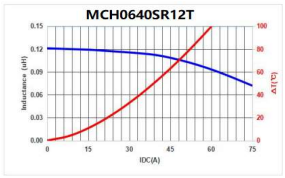
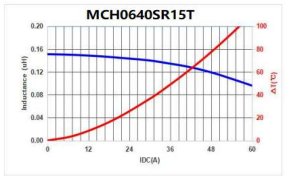
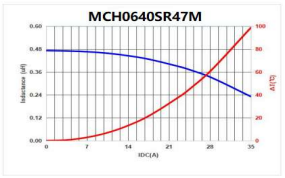
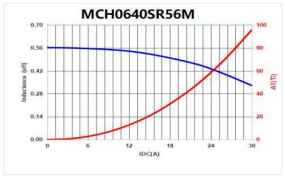
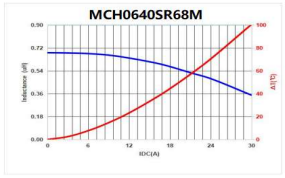
Curve:

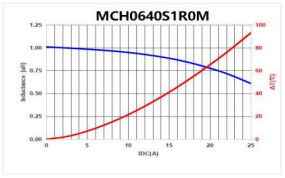


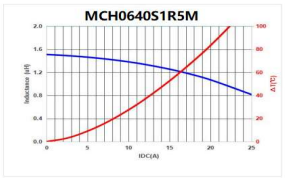


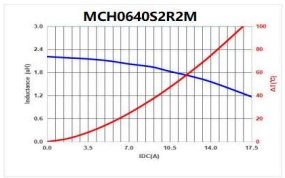


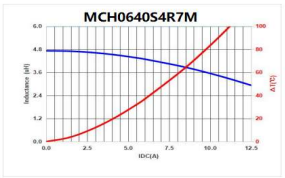


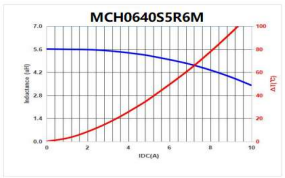


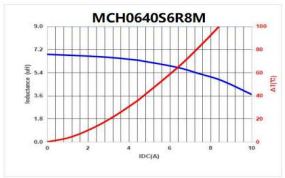


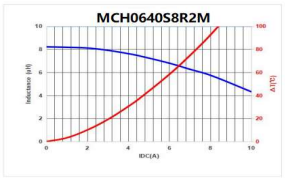


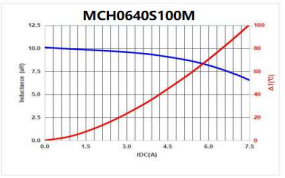


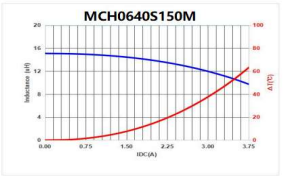


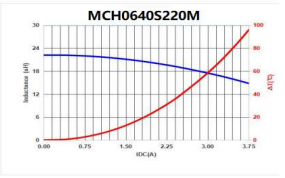


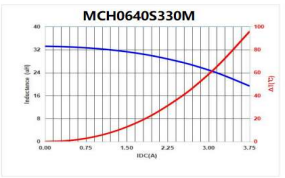












Molding Power Inductors -MCH Series

Packaging:

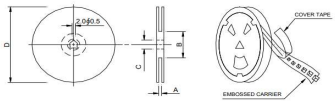
Packaging -Cover Tape

The force for tearing off cover tape is 10 to 130 grams in the arrow direction.

Packaging Quantity

Series	PCS/REEL
MCH0640	1000

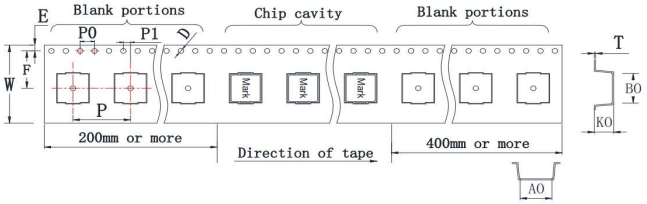
Reel Dimensions



Reel Dimensions:mm

Series	Type	A	B	C	D
MCH0640	13"x16mm	16.4+2/-0	100±2	13+0.5/0.2	330

Tape Dimensions in mm



Series	B0	A0	K0	P	W	D	E	F	P1	P0	T
MCH0640	7.7±0.1	7.1±0.1	4.3±0.1	12.0±0.1	16±0.3	1.5±0.1	1.75±0.1	7.5±0.1	2.0±0.1	4.0±0.1	0.40±0.05