

# SURFACE MOUNT HIGH CURRENT POWER INDUCTORS /SMPI TYPE

## FEATURES

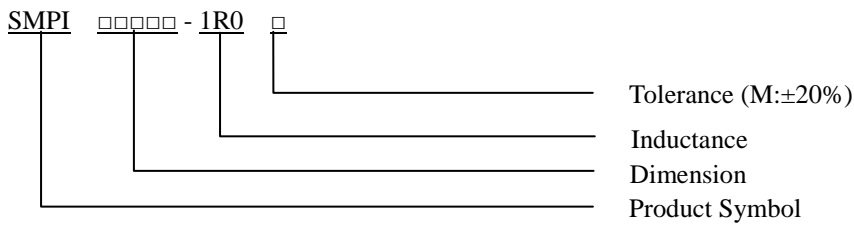
- ◆ Performance low resistance · high current rating.
- ◆ Low loss realized with low RDC.
- ◆ Low core loss.



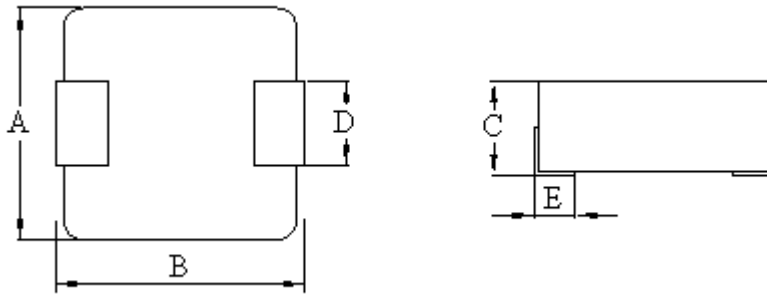
## APPLICATIONS

- ◆ PDA / Notebook / Desktop, and server applications.
- ◆ DC/DC converters in distributed power systems.
- ◆ DC/DC converter for Field Programmable Gate Array(FPGA)

## ORDERING CODE



## SHAPES



## SURFACE MOUNT HIGH CURRENT POWER INDUCTORS /SMPI TYPE

### DIMENSIONS (UNIT: mm)

Part No.	A	B	C (MAX)	D (REF)	E (REF)
SMPI 04020	4.0 ± 0.3	4.5 ± 0.4	2.0	1.8	1.0
SMPI 05015	5.2 ± 0.3	5.5 ± 0.4	1.5	2.0	1.0
SMPI 05030	5.2 ± 0.3	5.5 ± 0.4	3.0	2.0	1.0
SMPI 06020	6.6 ± 0.3	7.2 ± 0.5	2.0	3.0	1.6
SMPI 06030	6.6 ± 0.3	7.2 ± 0.5	3.0	3.0	1.6
SMPI 06050	6.6 ± 0.3	7.2 ± 0.5	5.0	3.0	1.6
SMPI 07050	7.2 ± 0.3	7.8 ± 0.5	5.0	3.0	1.6
SMPI 08030	8.0 ± 0.3	8.6 ± 0.6	3.0	3.0	1.8
SMPI 08040	8.0 ± 0.3	8.6 ± 0.6	4.0	3.0	1.8
SMPI 08050	8.0 ± 0.3	8.6 ± 0.6	5.0	3.0	1.8
SMPI 10040	10.0 ± 0.5	10.5 ± 1.0	4.0	3.0	2.2
SMPI 10045	10.0 ± 0.5	10.5 ± 1.0	4.5	3.0	2.2
SMPI 10050	10.0 ± 0.5	10.5 ± 1.0	5.0	3.0	2.2
SMPI 12040	12.8 ± 0.5	13.5 ± 1.0	4.0	3.8	2.5
SMPI 12050	12.8 ± 0.5	13.5 ± 1.0	5.0	3.8	2.5
SMPI 12065	12.8 ± 0.5	13.5 ± 1.0	6.5	3.8	2.5
SMPI 17070	17.2 (MAX)	18.0 ± 1.0	7.2	11.9	2.7
SMPI 22013	22.0 ± 0.3	22.5 ± 0.3	13	18.6	5.0

### ELECTRICAL CHARACTERISTICS FOR SMPI 04020

Part No.	Inductance (uH) @ (0A)	Test Frequency	Heat Rating Current Irms(A)	Saturation Current Isat ( A ) drop30%	RDC (mΩ) MAX
SMPI04020-R10M	0.10	100KHz/1V	14	35	4.2
SMPI04020-R15M	0.15	100KHz/1V	11	28	4.5
SMPI04020-R22M	0.22	100KHz/1V	10	25	5.5
SMPI04020-R33M	0.33	100KHz/1V	9.0	17	9.8
SMPI04020-R47M	0.47	100KHz/1V	8.5	15	15
SMPI04020-R56M	0.56	100KHz/1V	8.0	13	15
SMPI04020-R68M	0.68	100KHz/1V	7.0	12	19
SMPI04020-1R0M	1.00	100KHz/1V	6.0	10	28
SMPI04020-1R2M	1.20	100KHz/1V	5.0	9.0	32
SMPI04020-1R5M	1.50	100KHz/1V	4.0	8.0	37
SMPI04020-2R2M	2.20	100KHz/1V	4.0	7.0	60
SMPI04020-3R3M	3.30	100KHz/1V	3.0	6.0	96
SMPI04020-4R7M	4.70	100KHz/1V	3.0	5.0	125
SMPI04020-5R6M	5.60	100KHz/1V	2.5	4.5	155
SMPI04020-6R8M	6.80	100KHz/1V	2.5	4.0	165
SMPI04020-8R2M	8.20	100KHz/1V	2.0	3.0	260
SMPI04020-100M	10	100KHz/1V	1.8	3.0	310

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**SURFACE MOUNT HIGH CURRENT POWER INDUCTORS /SMPI TYPE**  
**ELECTRICAL CHARACTERISTICS FOR SMPI 05015**

Part No.	Inductance (uH) @(0A)	Test Frequency	Heat Rating Current Irms(A)	Saturation Current Isat ( A ) drop30%	RDC (mΩ) MAX
SMPI05015-R47M	0.47	100KHz/1V	9.0	12	13.5
SMPI05015-R68M	0.68	100KHz/1V	6.0	10	21.0
SMPI05015-1R0M	1.00	100KHz/1V	5.5	8.0	28.0
SMPI05015-2R2M	2.20	100KHz/1V	3.3	5.0	68.0
SMPI05015-3R3M	3.30	100KHz/1V	3.0	5.0	106
SMPI05015-4R7M	4.70	100KHz/1V	2.5	4.0	135
SMPI05015-5R6M	5.60	100KHz/1V	2.2	3.5	150
SMPI05015-6R8M	6.80	100KHz/1V	2.0	3.0	155
SMPI05015-100M	10	100KHz/1V	1.5	2.0	213

**ELECTRICAL CHARACTERISTICS FOR SMPI 05030**

Part No.	Inductance (uH) @(0A)	Test Frequency	Heat Rating Current Irms(A)	Saturation Current Isat ( A ) drop30%	RDC (mΩ) MAX
SMPI05030-R68M	0.68	100KHz/1V	9.0	12	11
SMPI05030-1R0M	1.00	100KHz/1V	8.0	10	13
SMPI05030-1R5M	1.50	100KHz/1V	6.0	9	18
SMPI05030-2R2M	2.20	100KHz/1V	5.5	8	30
SMPI05030-3R3M	3.30	100KHz/1V	5.0	7	38
SMPI05030-4R7M	4.70	100KHz/1V	4.0	6	62
SMPI05030-6R8M	6.80	100KHz/1V	3.0	5	90
SMPI05030-100M	10	100KHz/1V	2.0	3	115

**ELECTRICAL CHARACTERISTICS FOR SMPI 06020**

Part No.	Inductance (uH) @(0A)	Test Frequency	Heat Rating Current Irms(A)	Saturation Current Isat ( A ) drop30%	RDC (mΩ) MAX
SMPI06020-R10M	0.10	100KHz/1V	15	30	2.8
SMPI06020-R22M	0.22	100KHz/1V	13	22	7.0
SMPI06020-R68M	0.68	100KHz/1V	9.0	12	13.5
SMPI06020-1R0M	1.00	100KHz/1V	8.0	10	19.0
SMPI06020-2R2M	2.20	100KHz/1V	5.0	8	35.0
SMPI06020-3R3M	3.30	100KHz/1V	4.5	7	70.0
SMPI06020-4R7M	4.70	100KHz/1V	3.5	6	73.0
SMPI06020-6R8M	6.80	100KHz/1V	2.5	4	122

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### ELECTRICAL CHARACTERISTICS FOR SMPI 06030

Part No.	Inductance (uH) @ (0A)	Test Frequency	Heat Rating Current Irms(A)	Saturation Current Isat ( A ) drop30%	RDC (mΩ) MAX
SMPI06030-R10M	0.10	100KHz/1V	30	40.0	1.6
SMPI06030-R15M	0.15	100KHz/1V	26	35.0	2.1
SMPI06030-R22M	0.22	100KHz/1V	24	30.0	2.6
SMPI06030-R33M	0.33	100KHz/1V	21	27.0	3.5
SMPI06030-R47M	0.47	100KHz/1V	18	20.0	4.2
SMPI06030-R56M	0.56	100KHz/1V	16	18.0	4.2
SMPI06030-R68M	0.68	100KHz/1V	15	16.0	6.0
SMPI06030-R82M	0.82	100KHz/1V	14	15.5	8.5
SMPI06030-1R0M	1.00	100KHz/1V	11	15.0	11.0
SMPI06030-1R2M	1.20	100KHz/1V	10	14.0	12.5
SMPI06030-1R5M	1.50	100KHz/1V	9.0	13.0	12.5
SMPI06030-2R2M	2.20	100KHz/1V	8.0	10.0	19.0
SMPI06030-3R3M	3.30	100KHz/1V	6.0	9.0	27.6
SMPI06030-4R7M	4.70	100KHz/1V	5.0	8.0	45.0
SMPI06030-5R6M	5.60	100KHz/1V	4.5	7.0	48.0
SMPI06030-6R8M	6.80	100KHz/1V	4.0	6.5	63.0
SMPI06030-8R2M	8.20	100KHz/1V	3.5	6.0	63.0
SMPI06030-100M	10	100KHz/1V	3.0	5.0	95.0
SMPI06030-150M	15	100KHz/1V	2.8	4.0	128

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## SURFACE MOUNT HIGH CURRENT POWER INDUCTORS /SMPI TYPE

### ELECTRICAL CHARACTERISTICS FOR SMPI 06050

Part No.	Inductance (uH) @ (0A)	Test Frequency	Heat Rating Current Irms(A)	Saturation Current Isat ( A ) drop30%	RDC (mΩ) MAX
SMPI06050-R10M	0.10	100KHz/1V	35	50	1.6
SMPI06050-R22M	0.22	100KHz/1V	22	31	2.0
SMPI06050-R33M	0.33	100KHz/1V	23	28	2.8
SMPI06050-R47M	0.47	100KHz/1V	22	25	3.6
SMPI06050-R56M	0.56	100KHz/1V	19	22	4.5
SMPI06050-R68M	0.68	100KHz/1V	16	20	5.3
SMPI06050-R82M	0.82	100KHz/1V	14	19	6.0
SMPI06050-1R0M	1.00	100KHz/1V	13	18	6.8
SMPI06050-1R2M	1.20	100KHz/1V	12	16	6.8
SMPI06050-1R5M	1.50	100KHz/1V	11	14	8.0
SMPI06050-2R2M	2.20	100KHz/1V	10	13	12.5
SMPI06050-3R3M	3.30	100KHz/1V	9.0	11	15.5
SMPI06050-4R7M	4.70	100KHz/1V	7.5	10	20.0
SMPI06050-5R6M	5.60	100KHz/1V	6.5	8.0	23.0
SMPI06050-6R8M	6.80	100KHz/1V	5.5	7.5	28.0
SMPI06050-8R2M	8.20	100KHz/1V	5.0	7.5	41.0
SMPI06050-100M	10	100KHz/1V	4.5	7.0	41.0
SMPI06050-120M	12	100KHz/1V	4.2	6.5	53.0
SMPI06050-150M	15	100KHz/1V	4.0	6.0	62.0
SMPI06050-180M	18	100KHz/1V	3.5	5.5	88.0
SMPI06050-220M	22	100KHz/1V	3.0	5.0	93.0
SMPI06050-330M	33	100KHz/1V	2.5	4.0	145
SMPI06050-470M	47	100KHz/1V	2.0	3.0	208
SMPI06050-560M	56	100KHz/1V	1.8	2.5	248
SMPI06050-680M	68	100KHz/1V	1.5	2.0	310
SMPI06050-101M	100	100KHz/1V	1.2	1.8	348

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## SURFACE MOUNT HIGH CURRENT POWER INDUCTORS /SMPI TYPE

### ELECTRICAL CHARACTERISTICS FOR SMPI 07050

Part No.	Inductance (uH) @(0A)	Test Frequency	Heat Rating Current Irms(A)	Saturation Current Isat ( A ) drop30%	RDC (mΩ) MAX
SMPI07050-2R2M	2.2	100KHz/0.1V	9.0	14	12
SMPI07050-6R8M	6.8	100KHz/0.1V	5.5	8.0	30
SMPI07050-100M	10	100KHz/0.1V	4.8	7.0	65
SMPI07050-220M	22	100KHz/0.1V	3.0	5.0	140
SMPI07050-270M	27	100KHz/0.1V	3.0	4.5	182
SMPI07050-330M	33	100KHz/0.1V	2.0	4.0	237
SMPI07050-470M	47	100KHz/0.1V	2.0	3.5	247
SMPI07050-560M	56	100KHz/0.1V	1.8	3.0	310

### ELECTRICAL CHARACTERISTICS FOR SMPI 08030

Part No.	Inductance (uH) @(0A)	Test Frequency	Heat Rating Current Irms(A)	Saturation Current Isat ( A ) drop30%	RDC (mΩ) MAX
SMPI08030-1R0M	1.0	100KHz/1V	11	16	6.5
SMPI08030-1R5M	1.5	100KHz/1V	10	14	7.2
SMPI08030-1R8M	1.8	100KHz/1V	9.5	13	16
SMPI08030-2R2M	2.2	100KHz/1V	9.0	12	17
SMPI08030-3R3M	3.3	100KHz/1V	8.0	10	19

### ELECTRICAL CHARACTERISTICS FOR SMPI 08040

Part No.	Inductance (uH) @(0A)	Test Frequency	Heat Rating Current Irms(A)	Saturation Current Isat ( A ) drop30%	RDC (mΩ) MAX
SMPI08040-1R0M	1.0	100KHz/1V	13	18.0	6.5
SMPI08040-1R5M	1.5	100KHz/1V	12	16.0	8.0
SMPI08040-2R2M	2.2	100KHz/1V	10	15.0	9.0
SMPI08040-4R7M	4.7	100KHz/1V	8	11.5	19
SMPI08040-6R8M	6.8	100KHz/1V	6	10.0	27
SMPI08040-8R2M	8.2	100KHz/1V	5	8.0	48
SMPI08040-100M	10	100KHz/1V	5	7.0	48
SMPI08040-220M	22	100KHz/1V	4	6.0	118
SMPI08040-330M	33	100KHz/1V	3	4.0	168
SMPI08040-470M	47	100KHz/1V	2	3.5	200

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## SURFACE MOUNT HIGH CURRENT POWER INDUCTORS /SMPI TYPE

### ELECTRICAL CHARACTERISTICS FOR SMPI 08050

Part No.	Inductance (uH) @ (0A)	Test Frequency	Heat Rating Current Irms(A)	Saturation Current Isat ( A ) drop30%	RDC (mΩ) MAX
SMPI08050-R22M	0.22	100KHz/1V	20	35	1.2
SMPI08050-R68M	0.68	100KHz/1V	16	21	4.3
SMPI08050-R82M	0.82	100KHz/1V	15	20	4.8
SMPI08050-1R0M	1.00	100KHz/1V	14	19	5.8
SMPI08050-1R5M	1.50	100KHz/1V	13	18	6.5
SMPI08050-2R2M	2.20	100KHz/1V	11	17	9.0
SMPI08050-3R3M	3.30	100KHz/1V	10	15	12.5
SMPI08050-4R7M	4.70	100KHz/1V	9.0	13	19.0
SMPI08050-5R6M	5.60	100KHz/1V	8.0	12	23.5
SMPI08050-6R8M	6.80	100KHz/1V	7.0	11	25.0
SMPI08050-8R2M	8.20	100KHz/1V	6.0	10	36.0
SMPI08050-100M	10	100KHz/1V	5.5	9.0	37.0
SMPI08050-150M	15	100KHz/1V	5.0	8.0	60.0
SMPI08050-220M	22	100KHz/1V	4.0	7.0	79.0
SMPI08050-330M	33	100KHz/1V	3.5	5.0	142
SMPI08050-470M	47	100KHz/1V	3.0	4.0	165
SMPI08050-560M	56	100KHz/1V	2.0	3.5	176
SMPI08050-680M	68	100KHz/1V	1.8	2.5	206
SMPI08050-101M	100	100KHz/1V	1.5	2.0	285
SMPI08050-151M	150	100KHz/1V	1.2	1.8	430

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## SURFACE MOUNT HIGH CURRENT POWER INDUCTORS /SMPI TYPE

### ELECTRICAL CHARACTERISTICS FOR SMPI 10040

Part No.	Inductance (uH) @(0A)	Test Frequency	Heat Rating Current Irms(A)	Saturation Current Isat ( A ) drop30%	RDC (mΩ) MAX
SMPI10040-R15M	0.15	100KHz/1V	40	70	0.75
SMPI10040-R22M	0.22	100KHz/1V	30	50	1.0
SMPI10040-R33M	0.33	100KHz/1V	28	49	1.3
SMPI10040-R36M	0.36	100KHz/1V	25	48	1.3
SMPI10040-R45M	0.45	100KHz/1V	23	40	1.5
SMPI10040-R47M	0.47	100KHz/1V	21	35	1.5
SMPI10040-R56M	0.56	100KHz/1V	19	32	2.0
SMPI10040-R68M	0.68	100KHz/1V	18	25	2.0
SMPI10040-R82M	0.82	100KHz/1V	16	22	2.5
SMPI10040-1R0M	1.00	100KHz/1V	15	20	2.5
SMPI10040-1R5M	1.50	100KHz/1V	12	18	5.2
SMPI10040-2R2M	2.20	100KHz/1V	9.0	15	7.5
SMPI10040-3R3M	3.30	100KHz/1V	8.5	14	11.5
SMPI10040-4R7M	4.70	100KHz/1V	8.0	13	14.5
SMPI10040-5R6M	5.60	100KHz/1V	7.0	12	19.0
SMPI10040-6R8M	6.80	100KHz/1V	6.0	10	21.0
SMPI10040-8R2M	8.20	100KHz/1V	5.5	9.0	32.0
SMPI10040-100M	10	100KHz/1V	5.0	8.0	36.0
SMPI10040-150M	15	100KHz/1V	4.0	7.0	60.0
SMPI10040-220M	22	100KHz/1V	3.5	6.0	68.0
SMPI10040-330M	33	100KHz/1V	3.0	5.0	100
SMPI10040-470M	47	100KHz/1V	2.0	3.5	145

### ELECTRICAL CHARACTERISTICS FOR SMPI 10045

Part No.	Inductance (uH) @(0A)	Test Frequency	Heat Rating Current Irms(A)	Saturation Current Isat ( A ) drop30%	RDC (mΩ) MAX
SMPI10045-100M	10	100KHz / 1V	6.0	9.0	27
SMPI10045-150M	15	100KHz / 1V	5.0	8.0	42
SMPI10045-220M	22	100KHz / 1V	4.0	7.0	63
SMPI10045-330M	33	100KHz / 1V	3.5	5.5	96
SMPI10045-470M	47	100KHz / 1V	3.0	5.0	147
SMPI10045-680M	68	100KHz / 1V	2.5	4.5	210
SMPI10045-820M	82	100KHz / 1V	2.0	4.0	245
SMPI10045-101M	100	100KHz / 1V	1.5	3.0	265

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## SURFACE MOUNT HIGH CURRENT POWER INDUCTORS /SMPI TYPE

### ELECTRICAL CHARACTERISTICS FOR SMPI 10050

Part No.	Inductance (uH) @ (0A)	Test Frequency	Heat Rating Current Irms(A)	Saturation Current Isat ( A ) drop30%	RDC (mΩ) MAX
SMPI10050-R36M	0.36	100KHz/1V	36	52	1.1
SMPI10050-R68M	0.68	100KHz/1V	20	35	1.9
SMPI10050-R82M	0.82	100KHz/1V	18	30	2.5
SMPI10050-1R0M	1.00	100KHz/1V	16	28	2.5
SMPI10050-1R2M	1.20	100KHz/1V	15	25	2.8
SMPI10050-1R5M	1.50	100KHz/1V	13	21	3.1
SMPI10050-2R2M	2.20	100KHz/1V	11	20	6.2
SMPI10050-3R3M	3.30	100KHz/1V	10	15	7
SMPI10050-4R7M	4.70	100KHz/1V	9.0	15	12
SMPI10050-5R6M	5.60	100KHz/1V	8.5	14	16
SMPI10050-6R8M	6.80	100KHz/1V	8.0	13	16
SMPI10050-8R2M	8.20	100KHz/1V	7.0	12	27
SMPI10050-100M	10	100KHz/1V	7.0	11	28
SMPI10050-150M	15	100KHz/1V	6.0	10.0	42
SMPI10050-220M	22	100KHz/1V	5.0	8.0	65
SMPI10050-330M	33	100KHz/1V	4.0	6.0	95
SMPI10050-470M	47	100KHz/1V	3.5	5.5	142
SMPI10050-680M	68	100KHz/1V	3.0	5.0	218
SMPI10050-820M	82	100KHz/1V	2.5	4.5	240
SMPI10050-101M	100	100KHz/1V	2.0	4.0	250
SMPI10050-151M	150	100KHz/1V	1.8	3.5	425
SMPI10050-181M	180	100KHz/1V	1.5	3.0	460
SMPI10050-201M	200	100KHz/1V	1.2	2.5	470

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## SURFACE MOUNT HIGH CURRENT POWER INDUCTORS /SMPI TYPE

### ELECTRICAL CHARACTERISTICS FOR SMPI 12040

Part No.	Inductance (uH) @ (0A)	Test Frequency	Heat Rating Current Irms(A)	Saturation Current Isat ( A ) drop30%	RDC (mΩ) MAX
SMPI12040-R22M	0.22	100KHz/1V	32	50	0.9
SMPI12040-R33M	0.33	100KHz/1V	26	45	1.5
SMPI12040-R47M	0.47	100KHz/1V	23	40	1.6
SMPI12040-R68M	0.68	100KHz/1V	21	35	2.1
SMPI12040-1R0M	1.00	100KHz/1V	18	30	4.0
SMPI12040-1R5M	1.50	100KHz/1V	13	22	5.5
SMPI12040-2R2M	2.20	100KHz/1V	11	18	5.5
SMPI12040-3R3M	3.30	100KHz/1V	9	14	8.5
SMPI12040-4R7M	4.70	100KHz/1V	8	12	17.5
SMPI12040-6R8M	6.80	100KHz/1V	6	10	25
SMPI12040-8R2M	8.20	100KHz/1V	5	9	26
SMPI12040-100M	10	100KHz/1V	4	8	32

### ELECTRICAL CHARACTERISTICS FOR SMPI 12050

Part No.	Inductance (uH) @ (0A)	Test Frequency	Heat Rating Current Irms(A)	Saturation Current Isat ( A ) drop30%	RDC (mΩ) MAX
SMPI12050-R33M	0.33	100KHz/1V	40	60	1.0
SMPI12050-R36M	0.36	100KHz/1V	35	48	1.2
SMPI12050-R47M	0.47	100KHz/1V	25	45	1.2
SMPI12050-R56M	0.56	100KHz/1V	24	42	1.3
SMPI12050-R68M	0.68	100KHz/1V	23	38	1.3
SMPI12050-R82M	0.82	100KHz/1V	22	36	2.1
SMPI12050-1R0M	1.00	100KHz/1V	20	32	2.6
SMPI12050-1R2M	1.20	100KHz/1V	18	30	2.6
SMPI12050-1R5M	1.50	100KHz/1V	15	28	3.1
SMPI12050-2R2M	2.20	100KHz/1V	14	23	6.0
SMPI12050-3R3M	3.30	100KHz/1V	13	20	8.0
SMPI12050-4R7M	4.70	100KHz/1V	12	18	9.0
SMPI12050-5R6M	5.60	100KHz/1V	9.0	15	10.5
SMPI12050-6R8M	6.80	100KHz/1V	8.0	14	15.0
SMPI12050-8R2M	8.20	100KHz/1V	7.5	13	22.0
SMPI12050-100M	10	100KHz/1V	7.0	12	24.0
SMPI12050-150M	15	100KHz/1V	5.0	10	30.0
SMPI12050-220M	22	100KHz/1V	4.5	7	40.0
SMPI12050-330M	33	100KHz/1V	3.5	6	60.0
SMPI12050-470M	47	100KHz/1V	3.0	5	80.0
SMPI12050-680M	68	100KHz/1V	2.5	4	106

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## SURFACE MOUNT HIGH CURRENT POWER INDUCTORS /SMPI TYPE

### ELECTRICAL CHARACTERISTICS FOR SMPI 12065

Part No.	Inductance (uH) @ (0A)	Test Frequency	Heat Rating Current Irms(A)	Saturation Current Isat ( A ) drop30%	RDC (mΩ) MAX
SMPI12065-R47M	0.47	100KHz/1V	36	50	1.1
SMPI12065-1R0M	1.00	100KHz/1V	25	36	1.8
SMPI12065-1R2M	1.20	100KHz/1V	22	34	2.6
SMPI12065-1R5M	1.50	100KHz/1V	20	32	3.3
SMPI12065-2R2M	2.20	100KHz/1V	18	26	4.5
SMPI12065-3R3M	3.30	100KHz/1V	16	24	6.5
SMPI12065-4R7M	4.70	100KHz/1V	14	22	8.5
SMPI12065-5R6M	5.60	100KHz/1V	12	20	10.5
SMPI12065-6R8M	6.80	100KHz/1V	11	18	10.5
SMPI12065-8R2M	8.20	100KHz/1V	10	16	12.5
SMPI12065-100M	10	100KHz/1V	9.0	14	13.5
SMPI12065-150M	15	100KHz/1V	7.0	13	21.0
SMPI12065-220M	22	100KHz/1V	6.5	11	38.0
SMPI12065-330M	33	100KHz/1V	6.0	9.0	57.0
SMPI12065-470M	47	100KHz/1V	5.0	7.0	68.0
SMPI12065-560M	56	100KHz/1V	4.5	6.5	95.0
SMPI12065-680M	68	100KHz/1V	4.0	5.0	95.0
SMPI12065-101M	100	100KHz/1V	3.5	4.0	110
SMPI12065-151M	150	100KHz/1V	3.0	3.5	280
SMPI12065-201M	200	100KHz/1V	2.5	3.0	290
SMPI12065-221M	220	100KHz/1V	2.0	2.8	290
SMPI12065-331M	330	100KHz/1V	1.5	2.5	485
SMPI12065-401M	400	100KHz/1V	1.3	2.0	700

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## SURFACE MOUNT HIGH CURRENT POWER INDUCTORS /SMPI TYPE

### ELECTRICAL CHARACTERISTICS FOR SMPI 17070

Part No.	Inductance (uH) @ (0A)	Test Frequency	Heat Rating Current Irms(A)	Saturation Current Isat ( A ) drop30%	RDC (mΩ) MAX
SMPI17070-1R0M	1.0	100KHz/1V	35	60	1.6
SMPI17070-1R5M	1.5	100KHz/1V	33	50	2.5
SMPI17070-2R2M	2.2	100KHz/1V	30	40	3.2
SMPI17070-3R3M	3.3	100KHz/1V	23	30	3.8
SMPI17070-4R7M	4.7	100KHz/1V	20	26	4.8
SMPI17070-5R6M	5.6	100KHz/1V	18	23	5.0
SMPI17070-6R8M	6.8	100KHz/1V	17	22	7.5
SMPI17070-8R2M	8.2	100KHz/1V	16	20	9.0
SMPI17070-100M	10	100KHz/1V	14	18	10
SMPI17070-150M	15	100KHz/1V	12	16	21
SMPI17070-220M	22	100KHz/1V	10	13	25
SMPI17070-330M	33	100KHz/1V	8.0	10	33
SMPI17070-470M	47	100KHz/1V	7.0	9.0	45
SMPI17070-680M	68	100KHz/1V	5.0	8.5	73
SMPI17070-820M	82	100KHz/1V	4.5	8.0	104
SMPI17070-101M	100	100KHz/1V	4.0	7.0	115
SMPI17070-121M	120	100KHz/1V	3.5	5.5	118
SMPI17070-151M	150	100KHz/1V	3.0	5.0	150
SMPI17070-221M	220	100KHz/1V	2.5	4.0	265
SMPI17070-351M	350	100KHz/1V	1.8	3.0	415

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## SURFACE MOUNT HIGH CURRENT POWER INDUCTORS /SMPI TYPE

### ELECTRICAL CHARACTERISTICS FOR SMPI 22013

Part No.	Inductance (uH) @(0A)	Test Frequency	Heat Rating Current Irms(A)	Saturation Current Isat ( A ) drop30%	RDC (mΩ) MAX
SMPI22013-1R0M	1.0	100KHz/1V	60	75	1.1
SMPI22013-1R5M	1.5	100KHz/1V	55	70	1.2
SMPI22013-2R2M	2.2	100KHz/1V	50	65	1.5
SMPI22013-3R3M	3.3	100KHz/1V	48	60	1.8
SMPI22013-4R7M	4.7	100KHz/1V	45	55	2.0
SMPI22013-5R6M	5.6	100KHz/1V	40	52	2.5
SMPI22013-6R8M	6.8	100KHz/1V	35	42	3.5
SMPI22013-100M	10	100KHz/1V	32	40	4.5
SMPI22013-150M	15	100KHz/1V	22	30	6.8
SMPI22013-220M	22	100KHz/1V	19	26	11.0
SMPI22013-330M	33	100KHz/1V	16	23	17.5
SMPI22013-470M	47	100KHz/1V	13	18	24.0
SMPI22013-560M	56	100KHz/1V	12	16	35.0
SMPI22013-680M	68	100KHz/1V	11	13	38.0
SMPI22013-750M	75	100KHz/1V	10	12	39.0
SMPI22013-820M	82	100KHz/1V	9.0	11	40.0
SMPI22013-101M	100	100KHz/1V	8.0	10	45.0
SMPI22013-151M	150	100KHz/1V	6.0	8.0	80.0
SMPI22013-201M	200	100KHz/1V	5.0	6.0	105
SMPI22013-221M	220	100KHz/1V	4.5	5.5	125
SMPI22013-401M	400	100KHz/1V	2.5	4.0	230

Notes:

- 1) You require another part number please contact with us.
- 2) Inductance Tolerance  $\pm 20\%$  ; Frequency Test : 100KHz/1.0v
- 3) All test data is referenced to 25°C ambient.
- 4) Irms : DC current (A) that will cause an approximate  $\Delta T$  of 40°C
- 5) Isat : DC current (A) that will cause  $L_o$  to drop approximately 30%
- 6) We can design according to customer's request.



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# HIGH CURRENT POWER INDUCTORS / SIC TYPE

## FEATURES

- ◆ Clip Plated Type, Low Profile.
- ◆ High power, High saturation inductors.
- ◆ Ideal inductors for DC-DC conversion.
- ◆ Available on tape and reel for auto surface mounting.



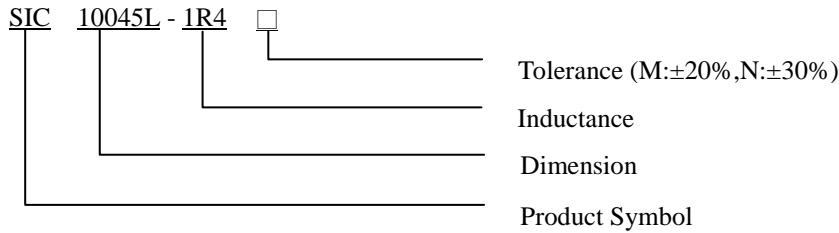
## APPLICATIONS

- ◆ Notebook / Desktop / server applications.
- ◆ Battery Power equipment.
- ◆ DC/DC converters.
- ◆ Power supplier, etc.

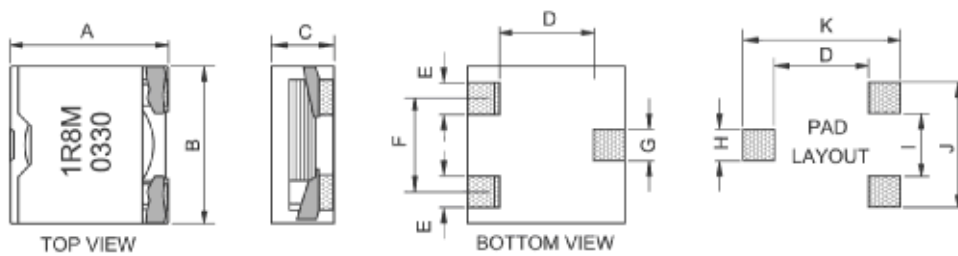
## INDUCTANCE AND RATED CURRENT RANGES

- ◆ SIC10045L 0.36~4.3uH 18.0~5.0A
- ◆ SIC10056L 0.36~8.8uH 19.0~4.8A
- ◆ SIC10056H 0.15~3.0uH 19.0~4.9A
- ◆ SIC12057 1.5~10.0uH 14.0~5.0A
- ◆ SIC12057U 0.35~5.6uH 18.5~7.6A
- ◆ SIC13050H 0.3~6.0uH 18.5~6.5A

## ORDERING CODE



## SHAPES



## DIMENSIONS (UNIT: mm)

Part No.	A (Max)	B (Max)	C (Max)	D (Ref)	E (Ref)	F (Ref)	G (Ref)	H (Ref)	I (Ref)	J (Ref)	K (Ref)
SIC10045	10.4	10.4	4.5	6.7	2.6	5.5	1.4	2.0	2.5	8.5	11.0
SIC10056	10.4	10.4	5.6	6.7	2.6	5.5	1.4	2.0	2.5	8.5	11.0
SIC12057	12.9	12.9	5.7	8.2	2.6	7.0	2.5	3.0	4.0	10.0	13.5
SIC13050	13.9	13.9	5.0	9.6	2.6	7.2	2.5	2.6	4.4	10.0	15.0

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## HIGH CURRENT POWER INDUCTORS / SIC TYPE

Part No.	Inductance (uH)	RDC (mΩ) Max			IDC (A) Max		
		10045L	10056L	10056H	10045L	10056L	10056H
<b>R15</b>	0.15			1.7			19.0
<b>R22</b>	0.22						
<b>R30</b>	0.30			2.4			17.7
<b>R36</b>	0.36	2.2	1.7		18.0	19.0	
<b>R45</b>	0.45						
<b>R50</b>	0.50			4.1			13.0
<b>R80</b>	0.80	3.7	2.4	5.3	13.4	16.0	11.2
<b>1R2</b>	1.20			7.5			9.0
<b>1R3</b>	1.30						
<b>1R4</b>	1.40	5.9	4.1		10.2	12.0	
<b>1R5</b>	1.50			10.5			7.8
<b>1R8</b>	1.80						
<b>2R0</b>	2.00			12.4			7.4
<b>2R2</b>	2.20	11.8	5.3		7.3	9.6	
<b>2R5</b>	2.50						
<b>3R0</b>	3.00			23.8			4.9
<b>3R2</b>	3.20	18.6	7.5		5.4	7.8	
<b>4R0</b>	4.00						
<b>4R3</b>	4.30	21.8	10.5		5.0	6.8	
<b>5R0</b>	5.00						
<b>5R7</b>	5.70		12.4			5.8	
<b>7R2</b>	7.20		18.0			5.3	
<b>8R8</b>	8.80		23.8			4.8	

★ Test Frequency: 100KHz / 1V



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## HIGH CURRENT POWER INDUCTORS / SIC TYPE

Part No.	Inductance ( $\mu$ H)	RDC ( $m\Omega$ ) Max			IDC (A) Max		
		12057	12057U	13050H	12057	12057U	13050H
<b>R30</b>	0.30			1.9			18.5
<b>R35</b>	0.35		1.8			18.5	
<b>R40</b>	0.40						
<b>R66</b>	0.66			2.5			17.0
<b>R80</b>	0.80		2.5			16.5	
<b>R90</b>	0.90						
<b>1R0</b>	1.00						
<b>1R2</b>	1.20			3.7			15.0
<b>1R4</b>	1.40		3.4			15.5	
<b>1R5</b>	1.50	2.5			14.0		
<b>1R6</b>	1.60						
<b>1R8</b>	1.80			6.6			10.5
<b>2R2</b>	2.20		5.4			12.5	
<b>2R5</b>	2.50	3.4			10.0		
<b>2R7</b>	2.70			10.8			8.0
<b>2R8</b>	2.80						
<b>3R2</b>	3.20		8.0			9.9	
<b>3R6</b>	3.60			12.0			7.5
<b>4R0</b>	4.00	8.0			8.3		
<b>4R3</b>	4.30		11.4			8.2	
<b>4R8</b>	4.80			16.3			7.0
<b>5R6</b>	5.60		13.5			7.6	
<b>6R0</b>	6.00	8.0		18.4	6.7		6.5
<b>6R4</b>	6.40						
<b>7R2</b>	7.20						
<b>8R0</b>	8.00						
<b>8R2</b>	8.20	11.4			5.8		
<b>100</b>	10.00	13.5			5.0		

★ Test Frequency: 100KHz / 1V



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# SURFACE MOUNT HIGH CURRENT POWER INDUCTORS / SER TYPE

## FEATURES

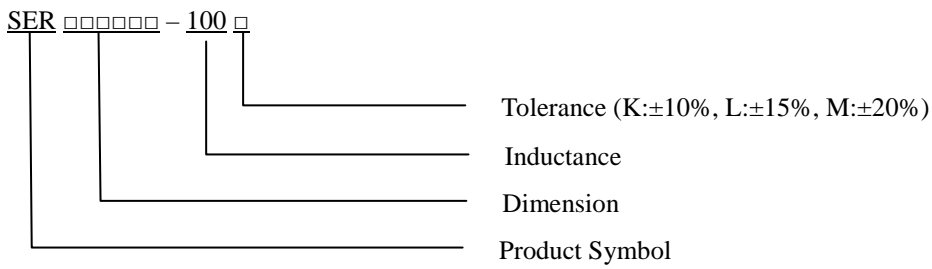
- ◆ Perfect for high current.
- ◆ Extremely low RDC.
- ◆ Low voltage power supply applications.
- ◆ Custom design available.



## APPLICATIONS

- ◆ Desktop/server applications.
- ◆ Battery Power equipment.
- ◆ DC/DC converters.
- ◆ Power supplier, etc.

## ORDERING CODE



## SHAPES

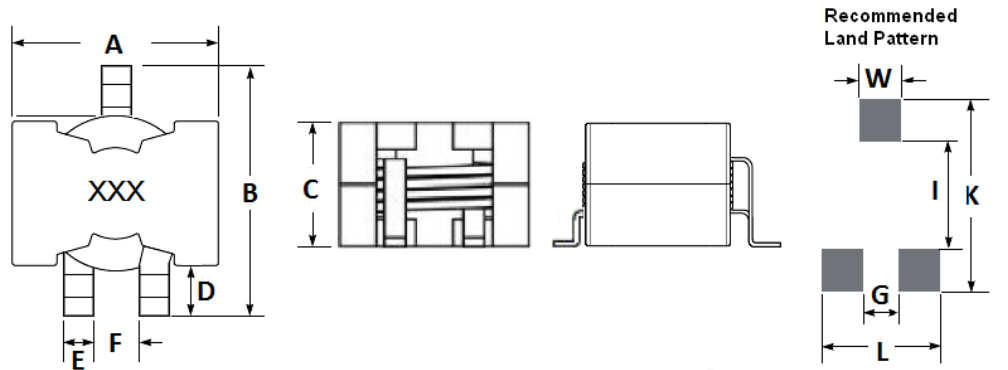


FIG. 1

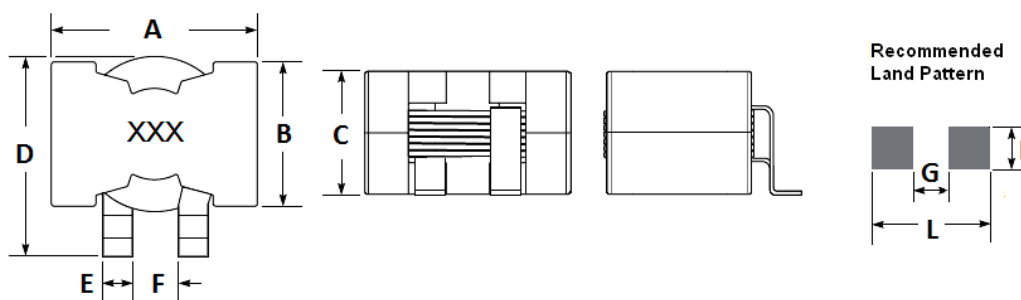


FIG. 2

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# SURFACE MOUNT HIGH CURRENT POWER INDUCTORS / SER TYPE

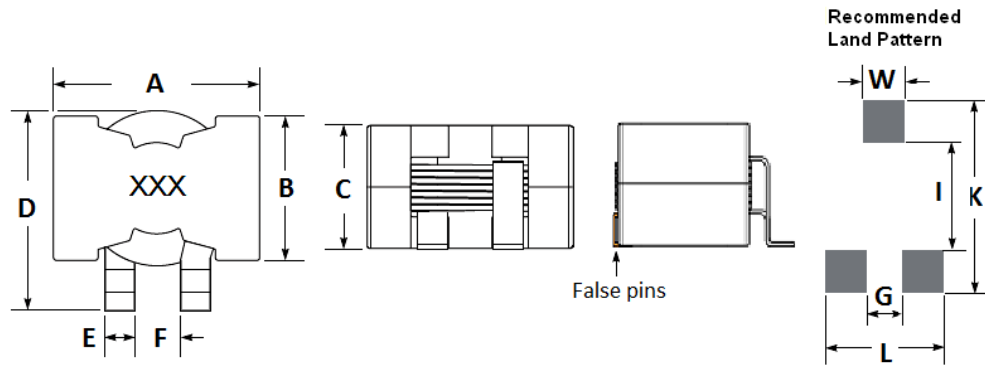


FIG. 3

**DIMENSIONS UNIT: mm (inch)**

Part No.	FIG.	A (MAX)	B (MAX)	C (MAX)	D (MAX)	E	F	G (REF)	I (REF)	K (REF)	L (REF)	W (REF)
SER2014T	1	21.8	24.5	14.5	4.0~7.5	2.2~3.8	4.0~7.0	4.0	13.0	23.0	14.0	5.0
SER2817H	2	27.9	19.3	17.0	28.5	3.8~4.0	6.6±0.5	4.8	5.6	-	15.6	-
SER2915HT	3	27.9	19.3	15.5	28.5	3.8~4.0	6.6±0.5	4.8	16.6	27.48	15.6	6.35
SER2918HT	3	27.9	19.3	17.5	28.5	3.8~4.0	6.6±0.5	4.8	16.6	27.48	15.6	6.35

## ELECTRICAL CHARACTERISTICS FOR SER2014T

Part No.	Inductance (uH)	Test Frequency (MHz)	RDC (mΩ) Max	IDC (A) Max
SER2014T - R70□	0.7	500KHz/0.1V	0.92	75
SER2014T - 1R4□	1.4	500KHz/0.1V	1.19	60
SER2014T - 2R2□	2.2	500KHz/0.1V	1.65	52
SER2014T - 3R1□	3.1	500KHz/0.1V	2.30	45
SER2014T - 4R2□	4.2	500KHz/0.1V	3.35	38
SER2014T - 5R5□	5.5	500KHz/0.1V	4.40	33
SER2014T - 7R0□	7.0	500KHz/0.1V	6.17	30
SER2014T - 8R6□	8.6	500KHz/0.1V	7.91	25
SER2014T - 100□	10	500KHz/0.1V	8.75	23
SER2014T - 150□	15	500KHz/0.1V	9.57	21
SER2014T - 220□	22	500KHz/0.1V	11.71	15
SER2014T - 330□	33	500KHz/0.1V	12.54	11
SER2014T - 470□	47	500KHz/0.1V	13.42	8.5

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## SURFACE MOUNT HIGH CURRENT POWER INDUCTORS / SER TYPE

### ELECTRICAL CHARACTERISTICS FOR SER2817H

Part No.	Inductance ( $\mu$ H)	Test Frequency (MHz)	RDC ( $m\Omega$ ) Max	IDC (A) Max
SER2817H - 3R3□	3.3	500KHz/0.1V	2.8	92.5
SER2817H - 4R7□	4.7	500KHz/0.1V	2.8	61.2
SER2817H - 6R8□	6.8	500KHz/0.1V	2.8	45.0
SER2817H - 100□	10	500KHz/0.1V	2.8	31.2
SER2817H - 150□	15	500KHz/0.1V	2.8	21.2
SER2817H - 220□	22	500KHz/0.1V	2.8	14.0
SER2817H - 330□	33	500KHz/0.1V	2.8	8.7

### ELECTRICAL CHARACTERISTICS FOR SER2915HT

Part No.	Inductance ( $\mu$ H)	Test Frequency (MHz)	RDC ( $m\Omega$ ) Max	IDC (A) Max
SER2915HT - 3R3□	3.3	500KHz/0.1V	1.75	66.9
SER2915HT - 4R7□	4.7	500KHz/0.1V	1.75	48.0
SER2915HT - 6R8□	6.8	500KHz/0.1V	1.75	34.5
SER2915HT - 100□	10	500KHz/0.1V	1.75	21.5
SER2915HT - 150□	15	500KHz/0.1V	1.75	14.0
SER2915HT - 220□	22	500KHz/0.1V	1.75	8.6
SER2915HT - 330□	33	500KHz/0.1V	1.75	5.1

### ELECTRICAL CHARACTERISTICS FOR SER2918HT

Part No.	Inductance ( $\mu$ H)	Test Frequency (MHz)	RDC ( $m\Omega$ ) Max	IDC (A) Max
SER2918H - 3R3□	3.3	500KHz/0.1V	2.8	92.5
SER2918H - 4R7□	4.7	500KHz/0.1V	2.8	61.2
SER2918H - 6R8□	6.8	500KHz/0.1V	2.8	45.0
SER2918H - 100□	10	500KHz/0.1V	2.8	31.2
SER2918H - 150□	15	500KHz/0.1V	2.8	21.2
SER2918H - 220□	22	500KHz/0.1V	2.8	14.0
SER2918H - 330□	33	500KHz/0.1V	2.8	8.7

# HIGH CURRENT POWER INDUCTORS / THT TYPE

## FEATURES

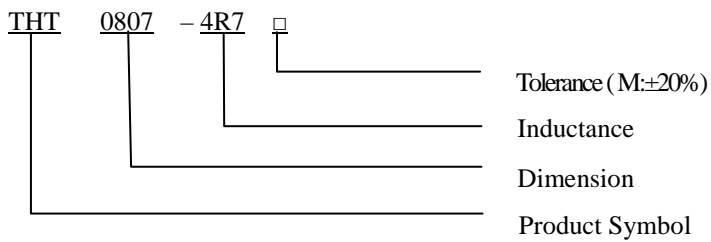
- ◆ High current
- ◆ High energy storage and low DCR.



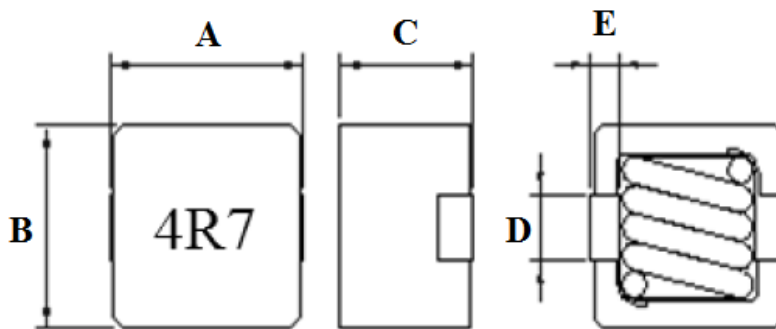
## APPLICATIONS

- ◆ PDA / Notebook / Desktop, and server applications.
- ◆ DC/DC converters in distributed power systems.
- ◆ DC/DC converter for Field Programmable Gate Array(FPGA).

## ORDERING CODE



## SHAPES



## DIMENSIONS (UNIT: mm)

Part No.	A(Max)	B(Max)	C(Max)	D(Ref)	D(Ref)
THT 0807	8.4	8.8	7.5	2.3	1.5
THT 1009	10.4	11.3	9.8	3.0	1.6
THT 1210	11.8	12.5	10.0	3.5	2.0

## HIGH CURRENT POWER INDUCTORS / THT TYPE

### ELECTRICAL CHARACTERISTICS FOR THT 0807

Part No.	Inductance (uH)	Test Frequency	RDC (mΩ) MAX	IDC (A) MAX
THT0807-R30M	0.30	100KHz/0.1V	1.54	36.0
THT0807-R47M	0.47	100KHz/0.1V	1.89	32.0
THT0807-R56M	0.56	100KHz/0.1V	2.00	28.0
THT0807-R68M	0.68	100KHz/0.1V	2.10	23.5
THT0807-R82M	0.82	100KHz/0.1V	3.25	23.0
THT0807-1R0M	1.00	100KHz/0.1V	3.80	22.0
THT0807-1R5M	1.50	100KHz/0.1V	4.84	18.5
THT0807-2R2M	2.20	100KHz/0.1V	5.60	12.5
THT0807-3R3M	3.30	100KHz/0.1V	7.15	8.5
THT0807-4R7M	4.70	100KHz/0.1V	13.64	8.0
THT0807-6R8M	6.80	100KHz/0.1V	24.42	7.5
THT0807-100M	10.0	100KHz/0.1V	44.55	6.0

### ELECTRICAL CHARACTERISTICS FOR THT 1009

Part No.	Inductance (uH)	Test Frequency	RDC (mΩ) MAX	IDC (A) MAX
THT1009-R22M	0.22	100KHz/0.1V	0.66	58.0
THT1009-R33M	0.33	100KHz/0.1V	0.70	50.0
THT1009-R47M	0.47	100KHz/0.1V	0.88	47.0
THT1009-R68M	0.68	100KHz/0.1V	1.49	34.0
THT1009-R82M	0.82	100KHz/0.1V	1.52	32.0
THT1009-1R0M	1.00	100KHz/0.1V	2.10	27.5
THT1009-1R5M	1.50	100KHz/0.1V	2.75	27.0
THT1009-2R2M	2.20	100KHz/0.1V	4.07	22.0
THT1009-3R3M	3.30	100KHz/0.1V	6.94	15.5
THT1009-4R7M	4.70	100KHz/0.1V	9.02	15.0
THT1009-6R8M	6.80	100KHz/0.1V	14.52	11.0
THT1009-8R2M	8.20	100KHz/0.1V	18.52	9.0
THT1009-100M	10.0	100KHz/0.1V	24.50	7.0

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## HIGH CURRENT POWER INDUCTORS / THT TYPE

### ELECTRICAL CHARACTERISTICS FOR THT 1210

Part No.	Inductance (uH)	Test Frequency	RDC (mΩ) MAX	IDC (A) MAX
THT1210-R22M	0.22	100KHz/0.1V	0.58	60.0
THT1210-R33M	0.33	100KHz/0.1V	0.62	55.0
THT1210-R47M	0.47	100KHz/0.1V	0.79	48.0
THT1210-R68M	0.68	100KHz/0.1V	0.85	38.0
THT1210-R82M	0.82	100KHz/0.1V	1.36	36.0
THT1210-1R0M	1.00	100KHz/0.1V	1.48	32.0
THT1210-1R5M	1.50	100KHz/0.1V	2.31	27.0
THT1210-2R2M	2.20	100KHz/0.1V	3.36	23.0
THT1210-3R3M	3.30	100KHz/0.1V	5.84	20.0
THT1210-4R7M	4.70	100KHz/0.1V	7.99	17.0
THT1210-6R8M	6.80	100KHz/0.1V	11.20	13.0
THT1210-8R2M	8.20	100KHz/0.1V	13.50	12.0
THT1210-100M	10.0	100KHz/0.1V	15.84	10.0