Wire Wound SMD Power Inductors

FEATURES

- Magnetic shield structure
- High current, low DC resistance
- Composite structure, ultra-low noise
- Good weldability and high heat resistance

APPLICATIONS

- PDA/Laptop, Desktop/Server, etc
- High current POL converter
- High current power supply, battery powered equipment
- DC-DC conversion of distributed power systems
- DC-DC conversion for field programmable gate arrays

PRODUCT IDENTIFICATION

SKSHC 0603 — 2R2 M

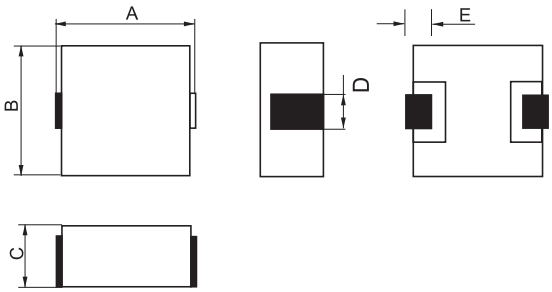
Product Code

Dimension：**L** × **W** × **H** (mm)
0402：4.6×4.0×2.0
0503：5.7×5.1×3.0
0603：7.2×6.6×3.0
0603L：7.2×6.6×3.0
0605：7.2×6.6×5.0
1004：11.6×10.1×4.0
1005：11.6×10.1×5.0
1204：13.8×12.6×4.0
1205：13.8×12.6×5.0
1265：13.8×12.6×6.5
1770：17.5×17.5×7.0

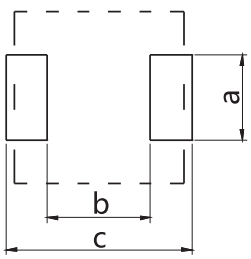
Inductance Deviation
M：±20%
N：±30%

Inductance Value
2R2：2.2μH
R47：0.47μH
100：10μH

SHAPE AND DIMENSIONS



RECOMMENDED PAD SIZE



Specification	Dimensions							
	A	B	Cmax	D	E	a Typ	b Typ	c Typ
SKSHC0402	4.6±0.3	4.0±0.3	2.0	2.0±0.3	0.8	2.5	2.5	5.2
SKSHC0503	5.7±0.3	5.1±0.3	3.0	2.1±0.3	1.2	2.5	2.2	6.5
SKSHC0603	7.2±0.4	6.6±0.3	3.0	3.0±0.3	1.6	3.5	3.7	8.5
SKSHC0603L	7.2±0.4	6.6±0.3	3.0	3.0±0.3	1.6	3.5	3.7	8.5
SKSHC0605	7.2±0.4	6.6±0.3	5.0	3.0±0.3	1.6	3.5	3.7	8.5
SKSHC1004	11.6max	10.1±0.3	4.0	3.0±0.3	2.5	3.5	5.4	13.0
SKSHC1005	11.6max	10.1±0.3	5.0	3.0±0.3	2.5	3.5	5.4	13.0
SKSHC1204	13.8max	12.6±0.3	4.0	3.5/3.0±0.5	2.7	5.0	6.5	14.5
SKSHC1205	13.8max	12.6±0.3	5.0	3.5/3.0±0.5	2.7	5.0	6.5	14.5
SKSHC1265	13.8max	12.6±0.3	6.5	3.5/3.0±0.5	2.7	5.0	6.5	14.5
SKSHC1770	17.5±1.0	17.5max	7.0	11.94±0.5	2.5	12.6	10.4	19.6

SPECIFICATIONS

SKSHC0402 TYPE

Part Number	Inductance	L Test Freq.	Max.DC Resistance	Temperature rise current	Saturation current
Units	μH	kHz/V	mΩ	A	A
Symbol	L	Freq	DCR	Irms	Isat
SKSHC0402-R22	0.22	100/1	6.6	9.0	12.5
SKSHC0402-R33	0.33	100/1	12.5	8.0	11.0
SKSHC0402-R47	0.47	100/1	14.0	7.0	10.0
SKSHC0402-R68	0.68	100/1	18.0	5.2	8.0
SKSHC0402-1R0	1.0	100/1	27.0	4.5	7.0
SKSHC0402-1R5	1.5	100/1	48.0	4.0	6.0
SKSHC0402-2R2	2.2	100/1	58.0	3.0	5.0
SKSHC0402-3R3	3.3	100/1	87.0	2.5	4.0
SKSHC0402-4R7	4.7	100/1	120.0	2.2	3.0
SKSHC0402-6R8	6.8	100/1	190.0	1.5	2.5
SKSHC0402-100	10.0	100/1	250.0	1.2	1.8

SKSHC0503 TYPE

Part Number	Inductance	L Test Freq.	Max.DC Resistance	Temperature rise current	Saturation current
Units	μH	kHz/V	mΩ	A	A
Symbol	L	Freq	DCR	Irms	Isat
SKSHC0503-R22	0.22	100/1	4.5	16.0	28.0
SKSHC0503-R33	0.33	100/1	7.0	14.0	18.0
SKSHC0503-R47	0.47	100/1	7.5	10.0	12.0
SKSHC0503-R68	0.68	100/1	12.0	8.0	12.0
SKSHC0503-1R0	1.0	100/1	15.0	7.0	9.0
SKSHC0503-1R2	1.2	100/1	15.0	6.5	8.8
SKSHC0503-1R5	1.5	100/1	25.0	6.0	8.5
SKSHC0503-2R2	2.2	100/1	29.0	5.5	8.0
SKSHC0503-3R3	3.3	100/1	38.0	4.5	6.0
SKSHC0503-4R7	4.7	100/1	60.0	4.0	5.0
SKSHC0503-6R8	6.8	100/1	86.0	3.5	4.5
SKSHC0503-8R2	8.2	100/1	105.0	3.3	4.0
SKSHC0503-100	10.0	100/1	126.0	2.5	3.5
SKSHC0503-150	15.0	100/1	190.0	1.8	2.2
SKSHC0503-220	22.0	100/1	260.0	1.3	1.9

SKSHC0603 TYPE

Part Number	Inductance	L Test Freq.	Max.DC Resistance	Temperature rise current	Saturation current
Units	μH	kHz/V	mΩ	A	A
Symbol	L	Freq	DCR	Irms	Isat
SKSHC0603-R22	0.22	100/1	3.0	23.0	34.0
SKSHC0603-R33	0.33	1000/1	3.5	21.0	25.0
SKSHC0603-R47	0.47	100/1	4.1	18.0	20.0
SKSHC0603-R68	0.68	100/1	5.9	16.0	17.0
SKSHC0603-R82	0.82	100/1	7.0	14.0	16.0
SKSHC0603-1R0	1.0	100/1	10.0	11.0	15.0
SKSHC0603-1R2	1.2	100/1	10.5	10.0	14.0
SKSHC0603-1R5	1.5	100/1	12.5	9.0	12.5

Part Number	Inductance	L Test Freq.	Max.DC Resistance	Temperature rise current	Saturation current
Units	μH	kHz/V	mΩ	A	A
Symbol	L	Freq	DCR	Irms	Isat
SKSHC0603-1R8	1.8	100/1	16.0	9.0	11.0
SKSHC0603-2R2	2.2	100/1	17.5	8.5	10.0
SKSHC0603-3R3	3.3	100/1	36.0	6.0	9.5
SKSHC0603-4R7	4.7	100/1	40.0	5.0	8.0
SKSHC0603-5R6	5.6	100/1	55.0	4.8	7.5
SKSHC0603-6R8	6.8	100/1	60.0	4.5	6.5
SKSHC0603-8R2	8.2	100/1	70.0	4.0	6.0
SKSHC0603-100	10.0	100/1	105.0	3.0	5.5
SKSHC0603-150	15.0	100/1	130.0	2.6	3.8
SKSHC0603-220	22.0	100/1	167.0	2.3	3.1
SKSHC0603-330	33.0	100/1	270.0	2.0	2.5
SKSHC0603-470	47.0	100/1	350.0	1.7	2.0

SKSHC0603L TYPE

Part Number	Inductance	L Test Freq.	Max.DC Resistance	Temperature rise current	Saturation current
Units	μH	kHz/V	mΩ	A	A
Symbol	L	Freq	DCR	Irms	Isat
SKSHC0603L-1R5M	1.5	100/1	12.1	9.5	12.0
SKSHC0603L-2R2M	2.2	100/1	15.0	9.0	10.0
SKSHC0603L-3R3M	3.3	100/1	22.0	6.5	9.5
SKSHC0603L-4R7M	4.7	100/1	33.0	5.5	8.0
SKSHC0603L-5R6M	5.6	100/1	42.0	5.0	6.5
SKSHC0603L-6R8M	6.8	100/1	48.0	4.5	6.0
SKSHC0603L-8R2M	8.2	100/1	60.0	4.0	6.0
SKSHC0603L-100M	10.0	100/1	68.0	3.5	5.5
SKSHC0603L-150M	15.0	100/1	113.0	2.5	4.0

SKSHC0605 TYPE

Part Number	Inductance	L Test Freq.	Max.DC Resistance	Temperature rise current	Saturation current
Units	μH	kHz/V	mΩ	A	A
Symbol	L	Freq	DCR	Irms	Isat
SKSHC0605-1R0	1.0	100/1	6.5	12.0	13.0
SKSHC0605-1R5	1.5	100/1	8.5	10.0	12.0
SKSHC0605-2R2	2.2	100/1	13.5	7.0	10.0
SKSHC0605-3R3	3.3	100/1	22.0	6.5	9.0
SKSHC0605-4R7	4.7	100/1	30.0	5.7	8.0
SKSHC0605-6R8	6.8	100/1	44.0	5.0	7.0
SKSHC0605-100	10.0	100/1	55.0	4.5	6.0
SKSHC0605-150	15.0	100/1	85.0	3.5	4.0
SKSHC0605-220	22.0	100/1	130.0	2.8	3.5
SKSHC0605-330	33.0	100/1	180.0	2.4	3.0
SKSHC0605-470	47.0	100/1	290.0	2.0	2.5
SKSHC0605-680	68.0	100/1	468.0	1.2	2.0

SKSHC1004 TYPE

Part Number	Inductance	L Test Freq.	Max.DC Resistance	Temperature rise current	Saturation current
Units	μH	kHz/V	mΩ	A	A
Symbol	L	Freq	DCR	Irms	Isat
SKSHC1004-R36	0.36	100/1	1.2	34	42
SKSHC1004-R47	0.47	100/1	1.68	28	38
SKSHC1004-R56	0.56	100/1	1.8	27	32
SKSHC1004-R68	0.68	100/1	2.4	23	30
SKSHC1004-R82	0.82	100/1	3.0	20	26
SKSHC1004-1R0	1.0	100/1	3.3	20	26
SKSHC1004-1R5	1.5	100/1	4.2	16	22
SKSHC1004-2R2	2.2	100/1	7.0	14	16
SKSHC1004-3R3	3.3	100/1	11.8	11	13
SKSHC1004-4R7	4.7	100/1	16.5	8.5	12
SKSHC1004-5R6	5.6	100/1	18.0	8.2	11
SKSHC1004-6R8	6.8	100/1	25.0	8	10

Part Number	Inductance	L Test Freq.	Max.DC Resistance	Temperature rise current	Saturation current
Units	μH	kHz/V	mΩ	A	A
Symbol	L	Freq	DCR	Irms	Isat
SKSHC1004-8R2	8.2	100/1	27.0	7.5	9
SKSHC1004-100	10	100/1	30.0	6.5	7
SKSHC1004-150	15	100/1	45.0	6.3	6
SKSHC1004-220	22	100/1	66.0	5	5.5
SKSHC1004-330	33	100/1	92.0	4	4.5
SKSHC1004-470	47	100/1	150.0	3	4
SKSHC1004-680	68	100/1	205.0	2.3	3

SKSHC1005 TYPE

Part Number	Inductance	L Test Freq.	Max.DC Resistance	Temperature rise current	Saturation current
Units	μH	kHz/V	mΩ	A	A
Symbol	L	Freq	DCR	Irms	Isat
SKSHC1005-1R0	1.0	100/1	3.0	19.0	28
SKSHC1005-1R5	1.5	100/1	4.0	16.0	21
SKSHC1005-1R8	1.8	100/1	5.0	15.0	20
SKSHC1005-2R2	2.2	100/1	6.6	13.0	19
SKSHC1005-3R3	3.3	100/1	11.0	11.0	18
SKSHC1005-4R7	4.7	100/1	15.0	10.0	15
SKSHC1005-5R6	5.6	100/1	18.0	8.5	14
SKSHC1005-6R8	6.8	100/1	19.2	8.0	13
SKSHC1005-100	10.0	100/1	28.0	7.0	10
SKSHC1005-150	15.0	100/1	42.0	6.5	7
SKSHC1005-220	22.0	100/1	66.0	5.5	6
SKSHC1005-330	33.0	100/1	84.0	4.5	5
SKSHC1005-470	47.0	100/1	150.0	3.0	4.5
SKSHC1005-680	68.0	100/1	205.0	2.5	3.5

SKSHC1204 TYPE

Part Number	Inductance	L Test Freq.	Max.DC Resistance	Temperature rise current	Saturation current
Units	μH	kHz/V	mΩ	A	A
Symbol	L	Freq	DCR	Irms	Isat
SKSHC1204-R47	0.47	100/1	2.0	29.0	38.4
SKSHC1204-R68	0.68	100/1	3.5	24.0	37.6
SKSHC1204-R82	0.82	100/1	4.5	24.0	32
SKSHC1204-1R0	1.0	100/1	7.5	20.0	28
SKSHC1204-1R5	1.5	100/1	9.5	17.0	24.4
SKSHC1204-2R2	2.2	100/1	11.5	15.0	20.8
SKSHC1204-3R3	3.3	100/1	13.0	13.0	16.8
SKSHC1204-4R7	4.7	100/1	14.5	11.0	14.4
SKSHC1204-6R8	6.8	100/1	20.0	8.0	11.2
SKSHC1204-100	10.0	100/1	25.0	7.0	8
SKSHC1204-150	15.0	100/1	39.0	5.8	6
SKSHC1204-220	22.0	100/1	51.0	3.8	4.8

SKSHC1205 TYPE

Part Number	Inductance	L Test Freq.	Max.DC Resistance	Temperature rise current	Saturation current
Units	μH	kHz/V	mΩ	A	A
Symbol	L	Freq	DCR	Irms	Isat
SKSHC1205-R33	0.33	100/1	0.9	46.0	62
SKSHC1205-R36	0.36	100/1	1.1	41.0	60
SKSHC1205-R47	0.47	100/1	1.3	37.0	46
SKSHC1205-1R0	1.0	100/1	2.5	29.0	37
SKSHC1205-1R5	1.5	100/1	4.1	23.0	30
SKSHC1205-1R8	1.8	100/1	4.5	18.0	26
SKSHC1205-2R2	2.2	100/1	5.0	15.0	25
SKSHC1205-3R3	3.3	100/1	9.0	12.0	20
SKSHC1205-4R7	4.7	100/1	11.5	11.0	16
SKSHC1205-5R6	56	100/1	15.0	10.5	15
SKSHC1205-6R8	6.8	100/1	22.0	9.0	14

Part Number	Inductance	L Test Freq.	Max.DC Resistance	Temperature rise current	Saturation current
Units	μH	kHz/V	mΩ	A	A
Symbol	L	Freq	DCR	Irms	Isat
SKSHC1205-8R2	8.2	100/1	24.0	8.5	13
SKSHC1205-100	10.0	100/1	29.0	7.5	11.0
SKSHC1205-150	15.0	100/1	32.0	6.0	9.0
SKSHC1205-220	22.0	100/1	50.0	5.0	7.0
SKSHC1205-330	33.0	100/1	84.0	3.5	6.0
SKSHC1205-470	47.0	100/1	130.0	3.0	5.0

SKSHC1265 TYPE

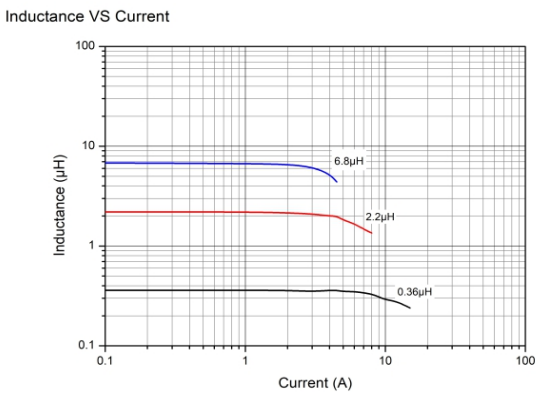
Part Number	Inductance	L Test Freq.	Max.DC Resistance	Temperature rise current	Saturation current
Units	μH	kHz/V	mΩ	A	A
Symbol	L	Freq	DCR	Irms	Isat
SKSHC1265-4R7	4.7	100/1	8.5	16	24
SKSHC1265-5R6	5.6	100/1	10.5	14	22.5
SKSHC1265-6R8	6.8	100/1	12.0	13	19
SKSHC1265-8R2	8.2	100/1	14.0	12	16
SKSHC1265-100	10.0	100/1	16.5	11	15
SKSHC1265-150	15.0	100/1	26.0	9.5	11
SKSHC1265-220	22.0	100/1	36.0	8	9
SKSHC1265-330	33.0	100/1	65.0	6.5	8
SKSHC1265-470	47.0	100/1	70.0	5.5	6.8

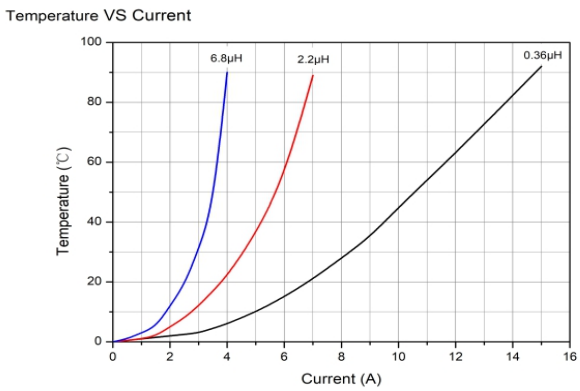
SKSHC1770 TYPE

Part Number	Inductance	L Test Freq.	Max.DC Resistance	Temperature rise current	Saturation current
Units	μH	kHz/V	mΩ	A	A
Symbol	L	Freq	DCR	Irms	Isat
SKSHC1770-1R0	1.0	100/1	1.9	32	55.5
SKSHC1770-1R5	1.5	100/1	2.8	23	40.0
SKSHC1770-2R2	2.2	100/1	3.0	18	40.0
SKSHC1770-3R3	3.3	100/1	3.2	15	35.0
SKSHC1770-4R7	4.7	100/1	5.8	13	30.0
SKSHC1770-6R8	6.8	100/1	8.0	10.5	22.5
SKSHC1770-8R2	8.2	100/1	13.0	9.5	20.0
SKSHC1770-100	10	100/1	13.0	9.5	19.0
SKSHC1770-150	15	100/1	22.0	9	14.0
SKSHC1770-220	22	100/1	26.0	8.5	12.0
SKSHC1770-330	33	100/1	38.5	8	10.7
SKSHC1770-470	47	100/1	53.0	6	8.7
SKSHC1770-560	56	100/1	60.5	5.2	7.2
SKSHC1770-680	68	100/1	79.0	4.5	6.1
SKSHC1770-101	100.0	100/1	123.0	4	5.0
SKSHC1770-680	68	100/1	79.0	4.5	6.1
SKSHC1770-101	100.0	100/1	123.0	4	5.0

TYPICAL ELECTRICAL CHARACTERISTICS

SKSHC0402 TYPE





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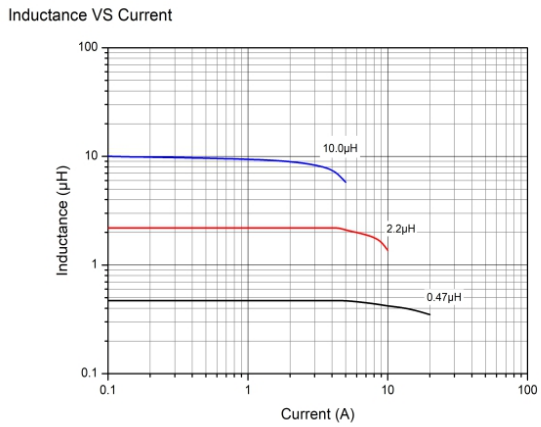

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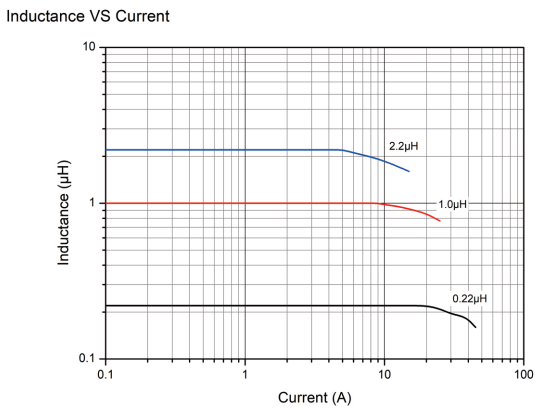

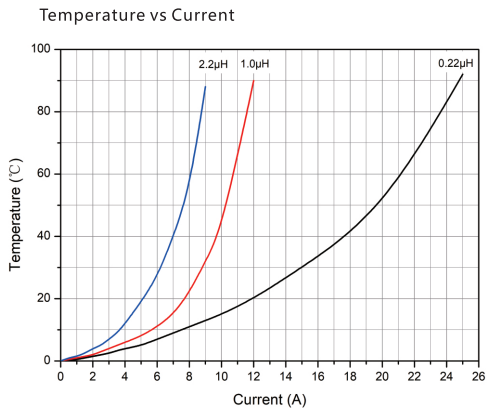

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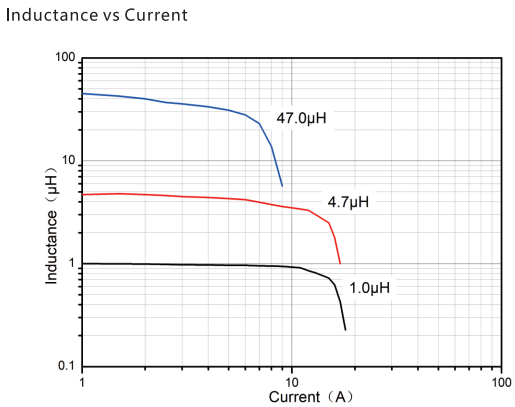

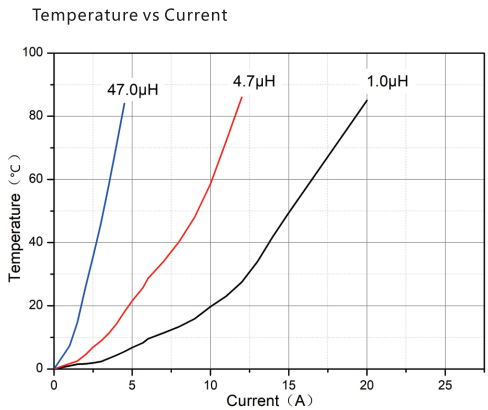

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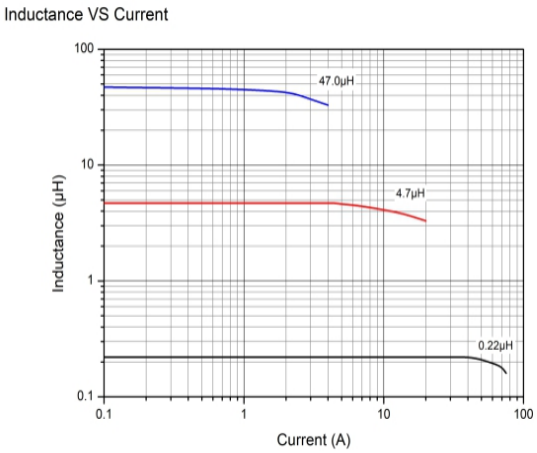
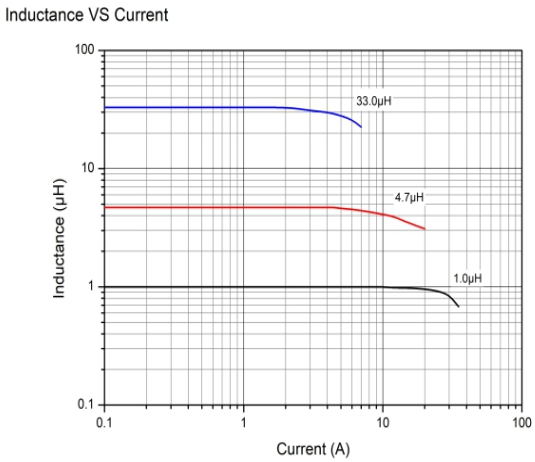
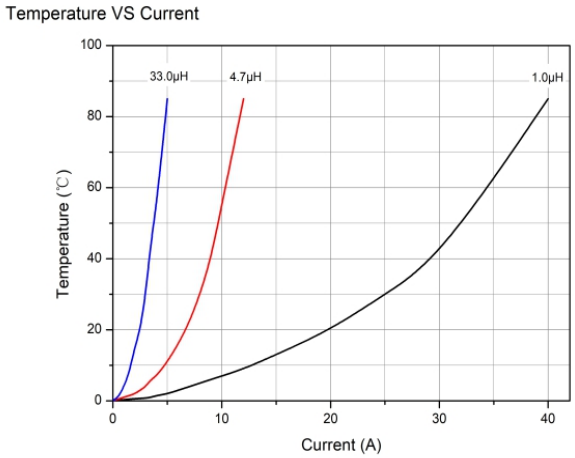
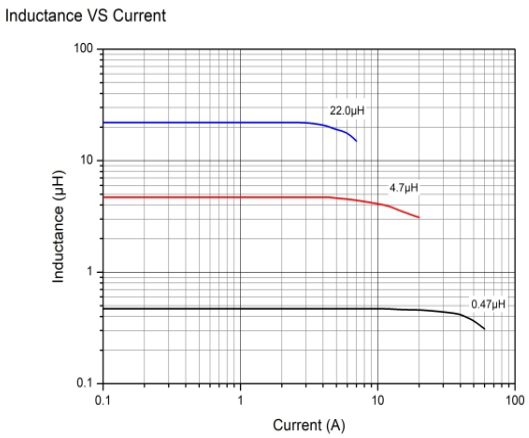


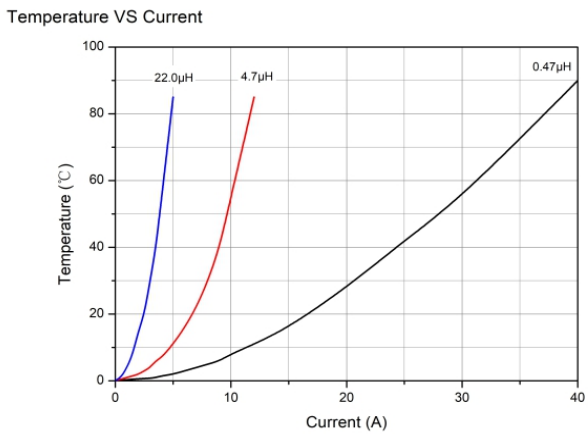
SKSHC1005 TYPE





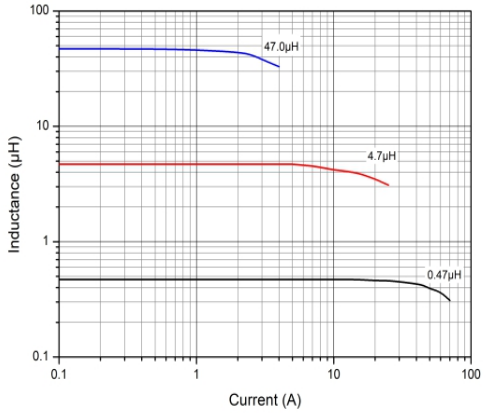
SKSHC1204 TYPE



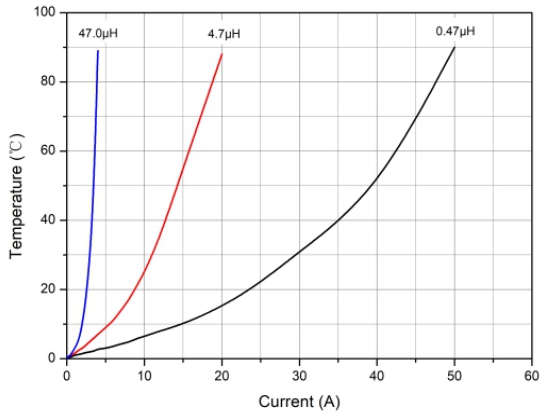


SKSHC1205 TYPE

Inductance VS Current

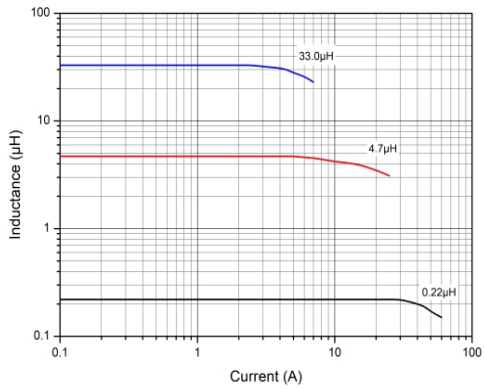


Temperature VS Current

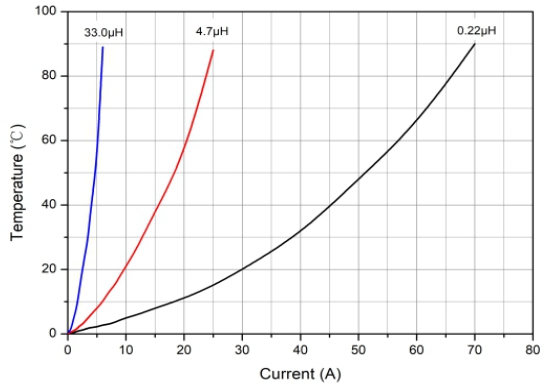


SKSHC1265 TYPE

Inductance VS Current

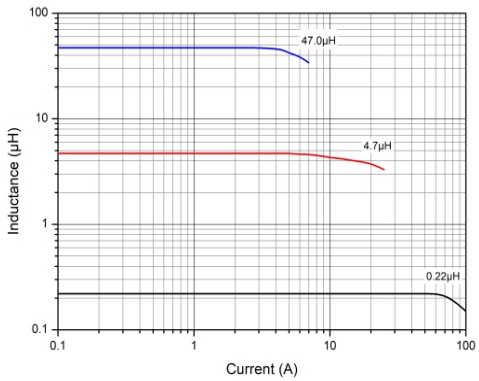
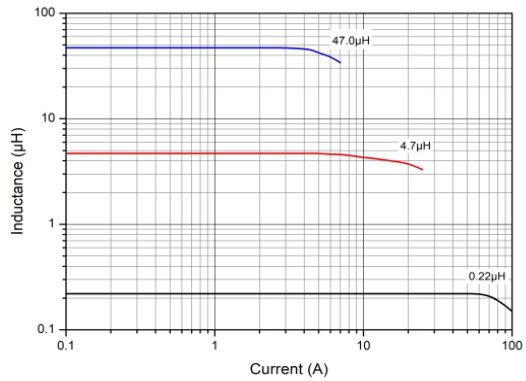


Temperature VS Current



SKSHC1770 TYPE

Inductance VS Current



Inductance VS Current