



Wire Wound SMD Power Inductors

FEATURES

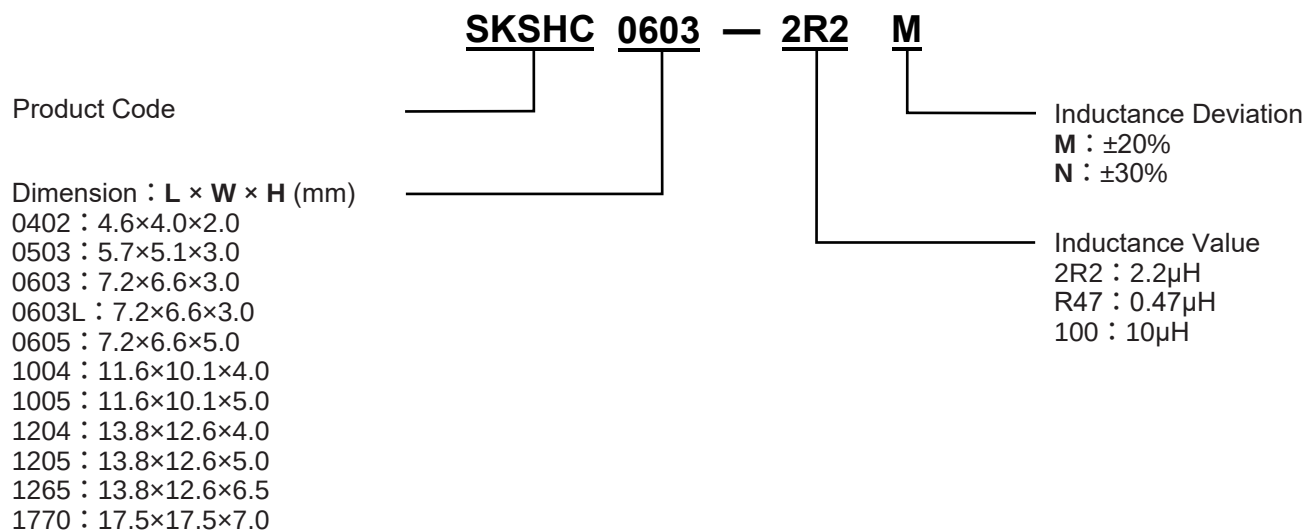
- Magnetic shield structure
- High current, low DC resistance
- Composite structure, ultra-low noise
- Good weldability and high heat resistance

APPLICATIONS

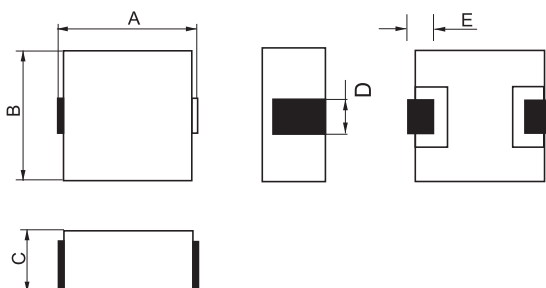
- PDA/Laptop, Desktop/Server, etc
- High current POL converter
- High current power supply, battery powered equipment
- DC-DC conversion of distributed power systems
- DC-DC conversion for field programmable gate arrays



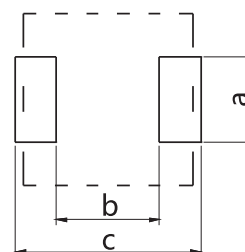
PRODUCT IDENTIFICATION



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	I _{rms}	I _{sat}
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	I _{rms}	I _{sat}
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	I _{rms}	I _{sat}
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	I _{rms}	I _{sat}
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	I _{rms}	I _{sat}
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	$\text{m}\Omega$	A	A
Symbol	L	Freq	DCR	I_{rms}	I_{sat}
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	$\text{m}\Omega$	A	A
Symbol	L	Freq	DCR	I_{rms}	I_{sat}
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



SKSHC Series

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	5.6	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	I _{rms}	I _{sat}
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	I _{rms}	I _{sat}
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	$\text{m}\Omega$	A	A
Symbol	L	Freq	DCR	I_{rms}	I_{sat}
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

Inductance VS Current



Temperature VS Current



SKSHC0503 TYPE

Inductance VS Current



SKSHC0603 TYPE

Inductance VS Current



Temperature vs Current

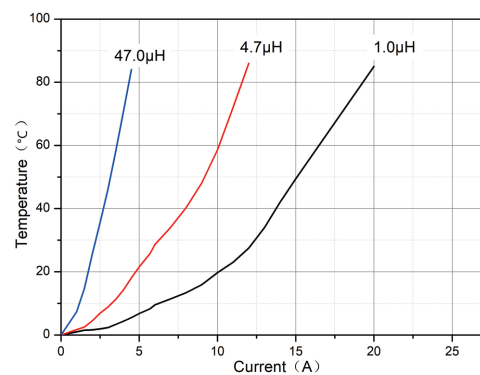


SKSHC0605 TYPE

Inductance vs Current

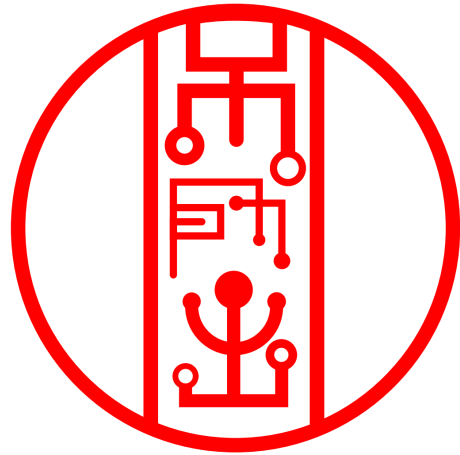
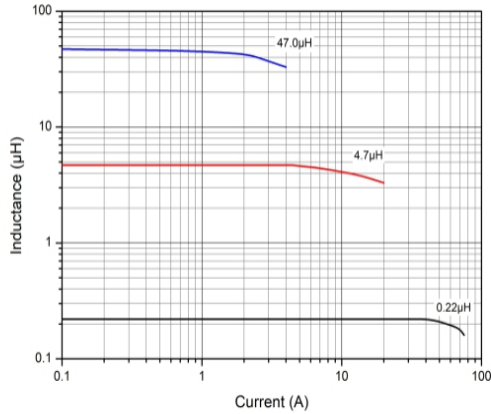


Temperature vs Current



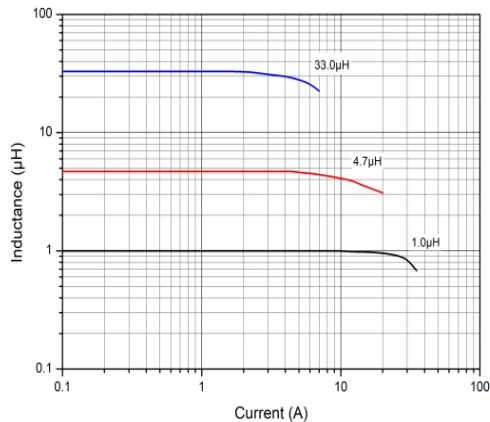
SKSHC1004 TYPE

Inductance VS Current

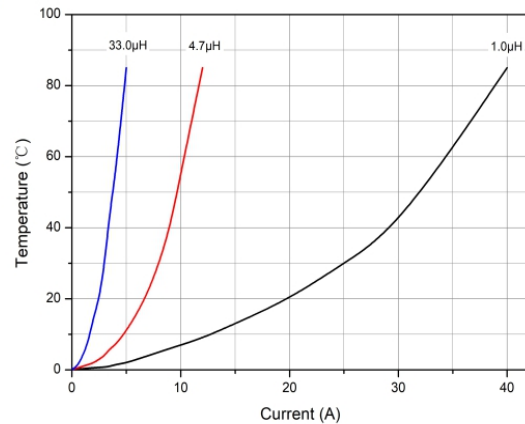


SKSHC1005 TYPE

Inductance VS Current

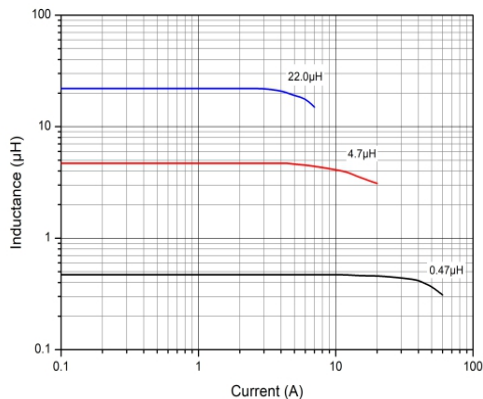


Temperature VS Current

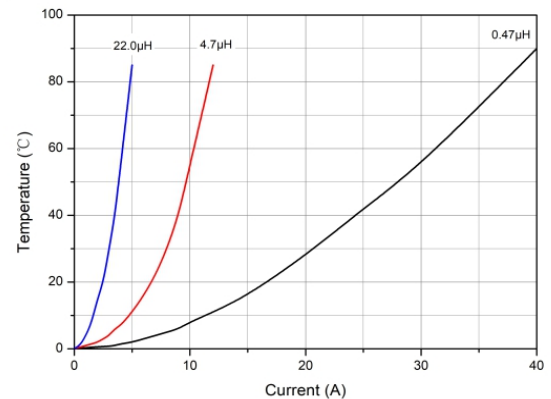


SKSHC1204 TYPE

Inductance VS Current



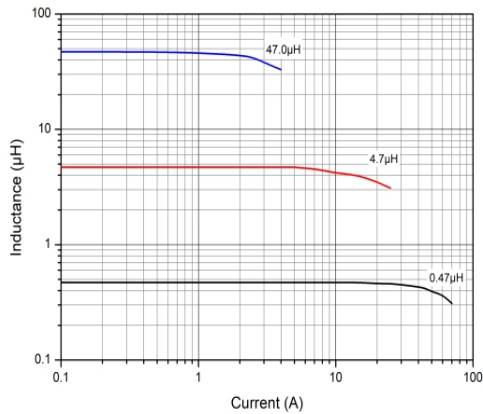
Temperature VS Current



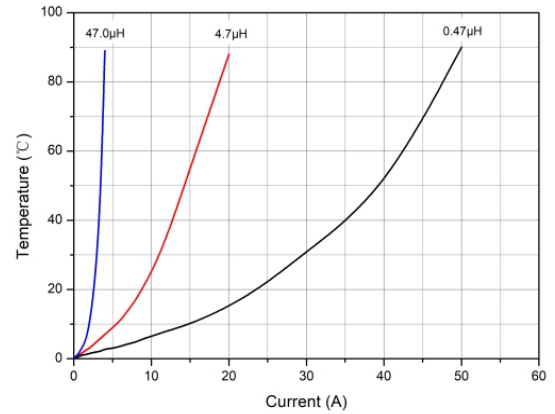


SKSHC1205 TYPE

Inductance VS Current

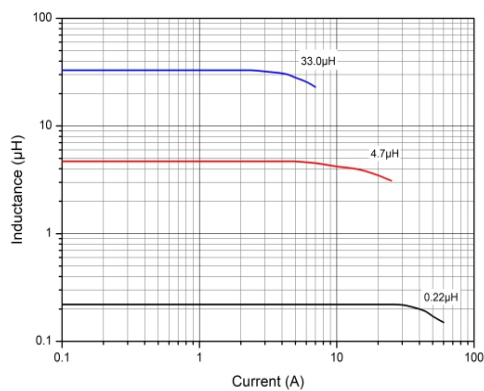


Temperature VS Current

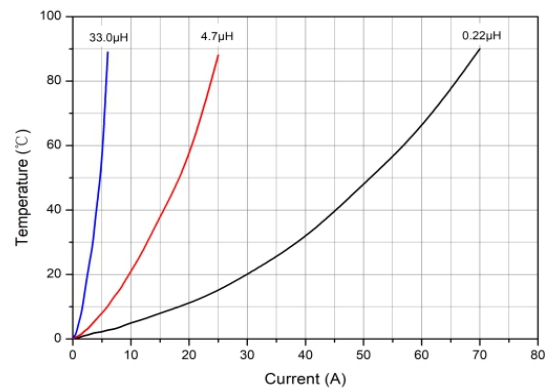


SKSHC1265 TYPE

Inductance VS Current



Temperature VS Current



SKSHC1770 TYPE

Inductance VS Current



Inductance VS Current

