

SHENZHEN HIGHSTARTECH ELECTRONICS CO., LTD

HSY SERIES

1. FEATURES:

- (1) Metal material for large current and low loss, low DCR
- (2) Low buzz noise, good magnetic shield performance
- (3) Small parasitic capacitance
- (4) Halogen free, RoHS compliant
- (5) High reliability -Reliability test complied to AEC-Q200.

2. APPLICATIONS:

- (1) Automotive Electronics,5G Communications
- (2) Internet of Things
- (3) Security device

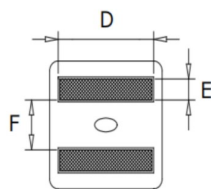
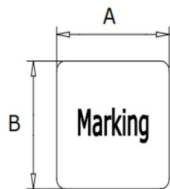
3. PART NUMBER SYSTEM:

HSY	6060	4R7	M	V
series	dimension	inductor	tolerance	grade

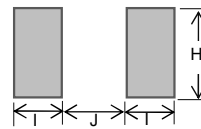
Tolerance:

J-----+/-5%	M-----+/-20%
K-----+/-10%	P-----+/-25%
L-----+/-15%	N-----+/-30%

4. PHYSICAL CHARACTERISTICS :



Recommended
Land Pattern



Series	A	B	C	D	E	F	ITyp.	JTyp.	HTyp.
HSY4030	4.15±0.35	4.15±0.35	3Max	3.2±0.3	1.0±0.3	1.4±0.3	1.3	1.7	3.5
HSY4040	4.15±0.35	4.15±0.35	4Max	3.2±0.3	1.0±0.3	1.4±0.3	1.3	1.7	3.5
HSY5030	5.5±0.2	5.3±0.2	3.1Max	4.3±0.3	1.1±0.2	2.3±0.3	1.3	2.6	4.6
HSY5050	5.5±0.2	5.3±0.2	5.1Max	4.3±0.3	1.1±0.2	2.3±0.3	1.3	2.6	4.6
HSY6060	6.7±0.3	6.5±0.3	6.1Max	5.3±0.3	1.4±0.2	2.7±0.3	1.6	3	5.6
HSY1060	11.9±0.3	11±0.3	6.1Max	9±0.3	2.4±0.3	4.4±0.3	1.7	4.7	9.3
HSY1010	11.9±0.3	11±0.3	10Max	10±0.3	2.2±0.2	4.4±0.3	1.7	4.7	10.3
HSY1580	16.2±0.2	15.2±0.2	8.1Max	12.5±0.3	3.0±0.2	7.6±0.3	3.2	7.9	12.8
HSY1510	16.2±0.3	15.2±0.2	10Max	12.5±0.3	3.0±0.2	7.6±0.3	3.2	7.9	12.8
HSY1712	18.2±0.5	17.2±0.5	12Max	14.5±0.3	3.3±0.3	8.3±0.3	3.6	8.6	14.8

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5. ELECTRICAL CHARACTERI

HSY4030 series

Part Number	L0(μH) @(0A)1MHz/1V	DCR(mΩ) MAX	Isat(A) Saturation current	Irms (A) Heat Rating Current
HSY4030-R30M-V	0.30±20%	0.3	19.0	24.0
HSY4030-R47M-V	0.47±20%	3.9	16.0	21.2
HSY4030-R62M-V	0.62±20%	4.6	14.0	15.0
HSY4030-R76M-V	0.76±20%	5.5	12.8	14.2
HSY4030-1R0M-V	1.0±20%	7.2	11.3	13.0
HSY4030-1R5M-V	1.5±20%	10.5	9.5	10.2
HSY4030-2R2M-V	2.2±20%	15.0	7.0	8.7
HSY4030-3R3M-V	3.3±20%	21.9	6.0	7.5
HSY4030-4R7M-V	4.7±20%	33.5	5.2	6.6
HSY4030-5R6M-V	5.6±20%	36.8	4.8	5.5
HSY4030-6R8M-V	6.8±20%	47.9	4.2	4.7

HSY4040 SERIES

Part Number	L0(μH) @(0A)1MHz/1V	DCR(mΩ) MAX	Isat(A) Saturation current	Irms (A) Heat Rating Current
HSY4040-R15M-V	0.15±20%	1.8	23.5	30.2
HSY4040-R30M-V	0.30±20%	2.6	19.2	24.6
HSY4040-R47M-V	0.47±20%	3.5	15.5	20.8
HSY4040-R68M-V	0.68±20%	4.8	12.7	18.3
HSY4040-1R0M-V	1.0±20%	5.6	11.5	14.8
HSY4040-1R5M-V	1.5±20%	7.9	10.6	12.5
HSY4040-2R2M-V	2.2±20%	13.9	10.0	11.0
HSY4040-3R3M-V	3.3±20%	18.6	8.2	8.7
HSY4040-4R7M-V	4.7±20%	26.8	6.1	7.1
HSY4040-6R8M-V	6.8±20%	37.7	5.2	5.6
HSY4040-8R2M-V	8.2±20%	44.3	4.3	5.4
HSY4040-100M-V	10±20%	55.8	3.6	5.0

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HSY5030 SERIES

Part Number	L0(μH) @0A)1MHz/1V	DCR(mΩ)	Isat(A) Saturation current	Irms (A) Heat Rating Current
HSY5030-R18M-V	0.18±20%	1.6	30	31.8
HSY5030-R35M-V	0.35±20%	2.2	24.5	30.6
HSY5030-R40M-V	0.40±20%	2.7	23	25.1
HSY5030-R52M-V	0.52±20%	3.0	20.5	25.0
HSY5030-R60M-V	0.60±20%	3.2	18.7	23.0
HSY5030-R65M-V	0.65±20%	4.0	17.9	21.2
HSY5030-R82M-V	0.82±20%	4.6	16.7	21.1
HSY5030-R90M-V	0.90±20%	5.2	14.5	19.7
HSY5030-1R0M-V	1.0±20%	5.8	14	17.8
HSY5030-1R5M-V	1.5±20%	7.9	12.2	15.4
HSY5030-2R2M-V	2.2±20%	10.6	9.4	12.9
HSY5030-3R3M-V	3.3±20%	14.9	8.4	10.0
HSY5030-4R7M-V	4.7±20%	24.5	6.7	8.5
HSY5030-5R6M-V	5.6±20%	27.0	6.0	7.9
HSY5030-6R8M-V	6.8±20%	32.1	5.5	7.3

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HSY5050 SERIES

Part Number	L0(μH) @(0A)1MHz/1V	DCR(mΩ)	Isat(A) Saturation current	Irms (A) Heat Rating Current
HSY5050-R16M-V	0.16±20%	1.5	32.0	26.0
HSY5050-R33M-V	0.33±20%	2.0	23.5	24.6
HSY5050-R50M-V	0.50±20%	2.7	19.0	24.2
HSY5050-R56M-V	0.56±20%	3.0	18.0	24.0
HSY5050-R72M-V	0.72±20%	3.3	16.8	23.5
HSY5050-R82M-V	0.82±20%	3.5	15.5	22.9
HSY5050-1R0M-V	1.0±20%	3.9	15.4	21.0
HSY5050-1R2M-V	1.2±20%	4.6	15.1	20.1
HSY5050-1R5M-V	1.5±20%	5.7	13.1	17.1
HSY5050-1R8M-V	1.8±20%	7.8	11.1	15.3
HSY5050-2R2M-V	2.2±20%	8.2	10.7	13.8
HSY5050-2R8M-V	2.8±20%	9.8	9.8	12.4
HSY5050-3R3M-V	3.3±20%	11.5	8.6	11.3
HSY5050-4R7M-V	4.7±20%	16.0	7.0	9.7
HSY5050-5R6M-V	5.6±20%	19.7	6.4	8.0
HSY5050-6R8M-V	6.8±20%	23.1	6.2	7.5
HSY5050-8R2M-V	8.2±20%	27.5	5.5	7.0
HSY5050-100M-V	10±20%	33.6	4.9	6.2
HSY5050-120M-V	12±20%	43.0	4.3	5.1
HSY5050-150M-V	15±20%	54.9	3.9	4.6
HSY5050-180M-V	18±20%	62.5	3.7	4.5

HSY6060 SERIES

Part Number	L0(μH) @(0A)1MHz/1V	DCR(mΩ)	Isat(A) Saturation current	Irms (A) Heat Rating Current
HSY6060-R22M-V	0.22±20%	1.3	41.0	48.0
HSY6060-R47M-V	0.47±20%	1.8	31.5	35.5
HSY6060-R68M-V	0.68±20%	2.3	28.5	32.0
HSY6060-1R0M-V	1.0±20%	2.9	25.4	28.0
HSY6060-1R5M-V	1.5±20%	3.8	22.8	26.0
HSY6060-2R2M-V	2.2±20%	6.8	18.0	20.7
HSY6060-3R3M-V	3.3±20%	8.8	16.2	16.0
HSY6060-4R7M-V	4.7±20%	13.2	14.0	12.0
HSY6060-5R6M-V	5.6±20%	16.8	12.0	10.0
HSY6060-6R8M-V	6.8±20%	18.9	10.0	8.2
HSY6060-100M-V	10±20%	25.5	8.5	7.5
HSY6060-150M-V	15±20%	44.0	6.6	6.0
HSY6060-220M-V	22±20%	57.8	5.6	5.1

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HSY1060 SERIES

Part Number	L0(μH) @ (0A) 1MHz/1V	DCR(mΩ)	Isat(A) Saturation current	Irms (A) Heat Rating Current
HSY1060-1R0M-V	1.0±20%	2.0	48.0	39.0
HSY1060-1R5M-V	1.5±20%	3.2	42.0	31.0
HSY1060-2R2M-V	2.2±20%	5.5	31.0	25.3
HSY1060-3R3M-V	3.3±20%	5.7	26.0	22.0
HSY1060-4R7M-V	4.7±20%	8.5	23.0	18.0
HSY1060-6R8M-V	6.8±20%	12.5	18.5	14.8
HSY1060-8R2M-V	8.2±20%	15.0	17.0	13.3
HSY1060-100M-V	10±20%	18.0	16.0	12.1
HSY1060-150M-V	15±20%	26.0	12.0	9.2

HSY1010 SERIES

Part Number	L0(μH) @ (0A) 1MHz/1V	DCR(mΩ)	Isat(A) Saturation current	Irms (A) Heat Rating Current
HSY1010-1R0M-V	1.0±20%	1.4	50.0	41.5
HSY1010-1R5M-V	1.5±20%	1.7	45.0	40.7
HSY1010-2R2M-V	2.2±20%	2.6	36.0	33.0
HSY1010-3R3M-V	3.3±20%	3.7	34.0	26.0
HSY1010-4R7M-V	4.7±20%	4.6	29.0	24.7
HSY1010-5R6M-V	5.6±20%	5.9	24.0	24.0
HSY1010-6R8M-V	6.8±20%	7.0	22.0	21.2
HSY1010-8R2M-V	8.2±20%	9.0	20.0	18.7
HSY1010-100M-V	10±20%	9.7	18.0	18.2
HSY1010-150M-V	15±20%	15.2	16.0	15.4
HSY1010-220M-V	22±20%	22.0	13.0	13.2
HSY1010-330M-V	33±20%	33.5	10.0	8.5
HSY1010-470M-V	47±20%	46.9	8.4	7.0
HSY1010-560M-V	56±20%	55.9	7.6	6.3

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HSY1580 SERIES

Part Number	L0(μH) @(0A)1MHz/1V	DCR(mΩ)	Isat(A) Saturation current	Irms (A) Heat Rating Current
HSY1580-1R0M-V	1.0±20%	1.12	73.5	57.5
HSY1580-1R5M-V	1.5±20%	1.38	65.0	46.7
HSY1580-1R8M-V	1.8±20%	1.93	57.0	43.8
HSY1580-2R2M-V	2.2±20%	2.29	51.0	39.9
HSY1580-3R3M-V	3.3±20%	3.10	43.0	34.4
HSY1580-4R7M-V	4.7±20%	4.58	34.2	27.0
HSY1580-5R6M-V	5.6±20%	5.22	33.0	26.5
HSY1580-6R8M-V	6.8±20%	6.79	31.0	22.6

HSY1510 SERIES

Part Number	L0(μH) @(0A)1MHz/1V	DCR(mΩ)	Isat(A) Saturation current	Irms (A) Heat Rating Current
HSY1510-4R7M-V	4.7±20%	3.8	39.0	29.0
HSY1510-6R8M-V	6.8±20%	4.6	36.0	26.0
HSY1510-8R2M-V	8.2±20%	7.5	30.3	24.0
HSY1510-100M-V	10±20%	9.0	26.3	22.0
HSY1510-150M-V	15±20%	12.4	23.0	18.0
HSY1510-220M-V	22±20%	16.0	18.7	14.0
HSY1510-330M-V	33±20%	20.0	16.7	12.0

HSY1712 SERIES

Part Number	L0(μH) @(0A)1MHz/1V	DCR(mΩ)	Isat(A) Saturation current	Irms (A) Heat Rating Current
HSY1712-1R0M-V	1.0±20%	1.1	95.0	55.0
HSY1712-1R5M-V	1.5±20%	1.3	77.0	50.0
HSY1712-2R2M-V	2.2±20%	1.5	69.5	43.5
HSY1712-3R3M-V	3.3±20%	1.9	59.0	41.7
HSY1712-4R7M-V	4.7±20%	2.3	51.5	37.7
HSY1712-5R6M-V	5.6±20%	2.8	47.0	33.9
HSY1712-7R5M-V	7.5±20%	3.6	42.0	32.0
HSY1712-100M-V	10±20%	4.4	35.0	27.9
HSY1712-150M-V	15±20%	7.2	29.0	22.7
HSY1712-180M-V	18±20%	7.9	27.0	21.2
HSY1712-220M-V	22±20%	9.8	24.0	19.5
HSY1712-330M-V	33±20%	15.2	20.5	15.4
HSY1712-470M-V	47±20%	20.7	16.5	13.3
HSY1712-680M-V	68±20%	31.3	12.8	11.0
HSY1712-820M-V	82±20%	38.4	12.5	9.7