



深圳市佑驰电子有限公司

Specification for Approval

产品名称: 电感

规格型号: HSB-XXX-XXX-M

产品编号:

日期: 2026-06-24

- 1、本承诺书的内容更改需经过双方确认，任一方单独的修改均视为无效。
- 2、本承诺书在送达客户后，请给予承认并即签回，如无签回下订单的，我司有权以此承诺书标准生产，并表示购买方默认许可。

核准	审核	制作
	Aaron	Ada

HSB SERIES

Product description:

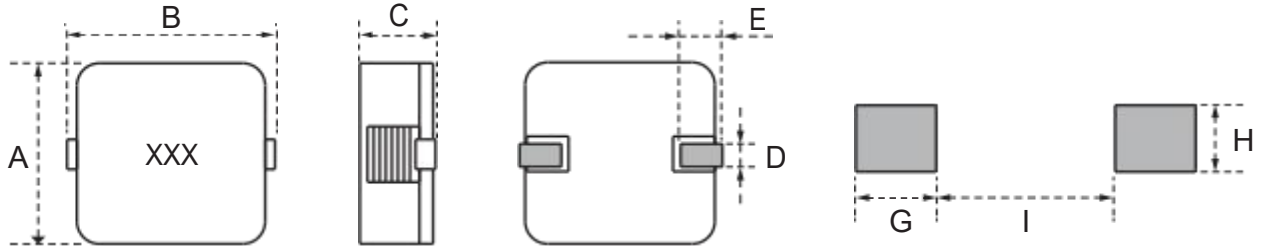
- High current, low loss of iron powder core.
- Low profile for machine placement.
- Minimize electromagnetic interference.
- Suppress common mode noise.
- Prevent EMI effect via precise impedance.
- Custom design available.



Explanation of part numbers:



Boundary dimension:



(unit: mm)

series	size	A	B	C	D	E	G	H	I
HSB-0540		5.3±0.3	5.6±0.3	4.0±0.3	1.0±0.3	1.2±0.5	2.2	2.0	2.0
HSB-0630		6.9±0.4	7.0±0.4	3.3Max	1.2±0.3	1.8±0.5	2.7	2.2	2.4
HSB-0640		6.9±0.4	7.0±0.4	4.0Max	1.2±0.3	1.8±0.5	2.7	2.2	2.4
HSB-0650		6.9±0.4	7.0±0.4	5.0Max	1.2±0.3	1.8±0.5	2.7	2.2	2.4
HSB-1030		10.2±0.5	10.5±0.5	3.1 Max	2.0±0.5	2.5±0.5	3.5	4.0	3.8
HSB-1040		10.2±0.5	10.5±0.5	4.2Max	2.0±0.5	2.5±0.5	3.5	4.0	3.8
HSB-1050		10.2±0.5	10.5±0.5	5.0Max	2.0±0.5	2.5±0.5	3.5	4.0	3.8
HSB-1335		12.8±0.5	13.0±1.0	3.5Max	2.5±0.5	3.0±1.0	4.5	5.0	6.0
HSB-1350		12.8±0.5	13.0±1.0	5.0Max	2.5±0.5	3.0±1.0	4.5	5.0	6.0
HSB-1365		12.8±0.5	13.0±1.0	6.5Max	2.5±0.5	3.0±1.0	4.5	5.0	6.0
HSB-1890		18.2±0.5	18.3±1.0	9.2Max	3.5±1.0	4.5±1.0	6.0	6.0	7.3
HSB-2212		22.0±1.0	22.5±1.0	12±0.4	3.5±1.0	5.5±1.0	7.0	6.0	9.0

Electrical characteristics:

100KHz/0.1V

Test condition: at 25°C

PART NO.	L(0A)(μH) (±20%)	I _{rms} (A) (Max.)	I _{sat} (A) (Typ.)	DCR(mΩ) (Typ.)	DCR(mΩ) Max.
HSB-0540-R22-M	0.22	20	25	1.25	1.38
HSB-0540-R33-M	0.33	18.50	20.0	1.75	1.93
HSB-0540-R47-M	0.47	15.00	16.0	2.75	3.03
HSB-0540-R68-M	0.68	12.75	13.5	4.00	4.40
HSB-0540-1R0-M	1.00	11.50	11.5	4.75	5.23
HSB-0540-1R5-M	1.50	9.00	9.0	8.15	8.97
HSB-0540-2R2-M	2.20	7.50	7.5	11.30	12.43
HSB-0540-3R3-M	3.30	5.75	5.8	18.50	20.35
HSB-0540-4R7-M	4.70	4.60	4.7	24.50	26.95
HSB-0540-5R6-M	5.60	4.50	4.6	28.50	31.35
HSB-0630-R13-M	0.13	22.00	48.0	0.91	1.00
HSB-0630-R24-M	0.24	18.00	40.0	1.80	1.98
HSB-0630-R52-M	0.52	14.00	20.0	3.70	4.07
HSB-0630-R95-M	0.95	11.00	13.0	6.20	6.82
HSB-0630-1R2-M	1.15	8.50	13.0	8.60	9.46
HSB-0630-1R5-M	1.50	7.50	12.0	12.70	13.97
HSB-0630-2R0-M	2.00	6.50	9.0	14.20	15.62
HSB-0640-R22-M	0.22	21.00	32.0	1.10	1.21
HSB-0640-R40-M	0.40	19.00	25.0	1.85	2.04
HSB-0640-R68-M	0.68	17.00	20.0	3.10	3.41
HSB-0640-1R0-M	1.00	15.00	19.0	4.60	5.06
HSB-0640-1R5-M	1.50	11.00	14.0	6.60	7.26
HSB-0640-2R2-M	2.20	9.00	13.0	11.40	12.54
HSB-0640-3R3-M	3.30	6.50	11.0	17.20	18.92
HSB-0640-4R7-M	4.70	6.00	7.0	19.50	21.45
HSB-0650-R24-M	0.24	20.00	28.0	1.00	1.10
HSB-0650-R47-M	0.47	18.00	20.0	1.35	1.49
HSB-0650-R76-M	0.76	15.50	15.0	2.25	2.48
HSB-0650-1R1-M	1.10	15.00	13.0	3.15	3.47
HSB-0650-1R5-M	1.50	13.00	11.0	4.30	4.73
HSB-0650-2R0-M	2.00	11.50	9.0	5.85	6.44
HSB-0650-3R3-M	3.30	9.00	8.0	9.00	9.90
HSB-0650-4R9-M	4.90	6.50	6.5	14.50	15.95
HSB-0650-6R5-M	6.50	6.00	6.0	21.50	23.65
HSB-0650-7R6-M	7.60	4.20	4.8	28.20	31.02
HSB-0650-8R5-M	8.50	4.00	4.5	30.50	33.55
HSB-0650-100-M	10.00	3.50	4.0	33.00	36.30
HSB-1030-R20-M	0.20	22.00	50.0	0.82	0.90
HSB-1030-R33-M	0.33	18.00	36.0	2.17	2.39
HSB-1030-R56-M	0.56	18.00	33.0	2.17	2.39
HSB-1030-R68-M	0.68	14.00	21.0	4.79	5.27
HSB-1030-1R0-M	1.00	14.00	21.0	4.79	5.27
HSB-1030-1R2-M	1.20	12.00	15.0	6.60	7.26
HSB-1030-1R5-M	1.50	12.00	18.0	6.60	7.26
HSB-1030-2R2-M	2.20	9.00	15.0	11.38	12.52

Electrical characteristics:

Test condition: at 25°C 100KHz/0.1V

PART NO.	L(0A)(μH) (±20%)	I _{rms} (A) (Max.)	I _{sat} (A) (Typ.)	DCR(mΩ) (Typ.)	DCR(mΩ) Max.
HSB-1040-R15-M	0.15	25.0	60.0	0.58	0.64
HSB-1040-R30-M	0.30	22.0	35.0	1.10	1.21
HSB-1040-R56-M	0.56	20.0	30.0	1.61	1.77
HSB-1040-1R0-M	1.00	16.0	20.0	3.30	3.63
HSB-1040-1R5-M	1.50	14.0	17.0	5.30	5.83
HSB-1040-2R0-M	2.00	11.0	13.0	7.30	8.03
HSB-1040-2R8-M	2.80	9.5	11.0	10.60	11.66
HSB-1040-4R3-M	4.30	8.0	8.0	14.10	15.51
HSB-1040-5R6-M	5.60	6.7	7.5	20.60	22.66
HSB-1050-R16-M	0.16	25.0	58.0	0.51	0.56
HSB-1050-R40-M	0.40	24.0	37.0	0.67	0.74
HSB-1050-R72-M	0.72	22.0	35.0	1.30	1.43
HSB-1050-1R2-M	1.20	20.0	25.0	1.80	1.98
HSB-1050-1R8-M	1.80	16.0	18.0	3.50	3.85
HSB-1050-2R4-M	2.40	14.0	17.0	4.75	5.23
HSB-1050-3R3-M	3.30	12.0	15.0	5.90	6.49
HSB-1050-4R2-M	4.20	11.0	14.0	7.10	7.81
HSB-1050-5R5-M	5.50	10.0	12.0	10.30	11.33
HSB-1050-6R5-M	6.50	8.4	10.0	12.50	13.75
HSB-1050-7R8-M	7.80	8.0	9.5	13.60	14.96
HSB-1050-100-M	10.00	7.2	8.5	16.30	17.93
HSB-1050-160-M	16.00	5.0	6.5	34.50	37.95
HSB-1335-R25-N	0.25	24.0	60.0	0.75	0.83
HSB-1335-R68-M	0.68	22.0	40.0	1.58	1.74
HSB-1335-1R2-M	1.20	17.0	28.0	2.85	3.14
HSB-1335-1R8-M	1.80	14.0	22.0	5.60	6.16
HSB-1335-2R2-M	2.20	14.0	18.0	5.70	6.27
HSB-1335-3R3-M	3.30	12.0	14.0	8.10	8.91
HSB-1350-R19-M	0.19	29.0	60.0	0.50	0.55
HSB-1350-R47-M	0.47	26.0	50.0	0.90	0.99
HSB-1350-R90-M	0.90	24.0	28.0	1.60	1.76
HSB-1350-1R4-M	1.40	22.0	26.0	2.40	2.64
HSB-1350-2R3-M	2.30	17.5	17.0	3.70	4.07
HSB-1350-3R2-M	3.20	16.0	15.0	5.30	5.83
HSB-1350-4R8-M	4.80	11.0	13.0	10.50	11.55
HSB-1350-6R0-M	6.00	9.5	11.5	13.50	14.85
HSB-1350-8R2-M	8.20	10.0	11.0	11.60	12.76
HSB-1350-100-M	10.00	8.5	10.0	14.10	15.51

Electrical characteristics:

100KHz/0.1V

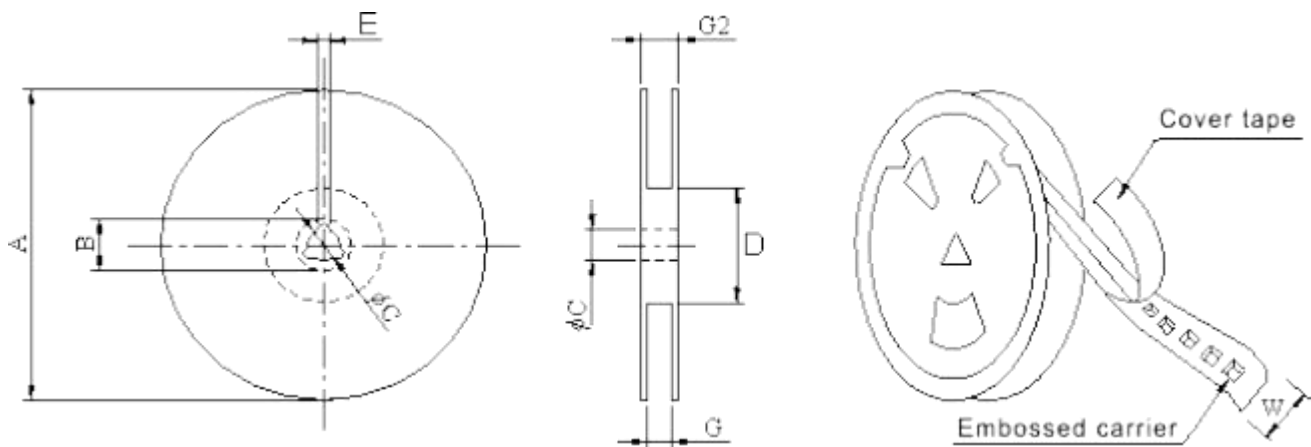
Test condition: at 25°C

PART NO.	L(0A)(μH) (±20%)	I _{rms} (A) (Max.)	I _{sat} (A) (Typ.)	DCR(mΩ) (Typ.)	DCR(mΩ) Max.
HSB-1365-R22-M	0.20	32.0	65.0	0.35	0.39
HSB-1365-R47-M	0.47	30.0	50.0	0.67	0.74
HSB-1365-R82-M	0.82	27.0	35.0	0.90	0.99
HSB-1365-1R3-M	1.30	25.0	25.0	1.80	1.98
HSB-1365-2R0-M	2.00	23.0	22.0	2.60	2.86
HSB-1365-2R8-M	2.80	20.0	17.5	3.30	3.63
HSB-1365-3R7-M	3.70	17.0	16.0	4.90	5.39
HSB-1365-4R7-M	4.70	13.0	15.0	7.00	7.70
HSB-1365-6R0-M	6.00	12.0	14.0	8.40	9.24
HSB-1365-7R3-M	7.30	13.0	12.0	5.90	6.49
HSB-1365-9R2-M	9.20	12.0	10.5	7.80	8.58
HSB-1365-110-M	11.30	11.0	9.5	9.10	10.00
HSB-1365-130-M	13.00	10.0	9.0	11.20	12.32
HSB-1365-150-M	15.40	9.0	8.0	14.80	16.28
HSB-1365-180-M	18.00	7.5	7.5	22.00	24.20
HSB-1365-220-M	22.00	6.0	6.5	24.70	27.17
HSB-1365-330-M	33.00	5.5	5.5	30.50	33.55
HSB-1890-R82-M	0.82	41.5	65.0	0.54	0.58
HSB-1890-1R3-M	1.30	34.5	62.0	0.94	1.02
HSB-1890-1R9-M	1.90	32.5	52.0	1.20	1.30
HSB-1890-2R6-M	2.60	31.5	50.0	1.58	1.71
HSB-1890-3R5-M	3.50	22.5	37.0	3.10	3.35
HSB-1890-4R5-M	4.50	20.5	37.0	3.40	3.67
HSB-1890-5R6-M	5.60	19.0	33.0	3.70	4.00
HSB-1890-6R8-M	6.80	18.5	27.0	4.10	4.43
HSB-1890-100-M	10.00	15.0	21.5	6.90	7.45
HSB-1890-100M-MN	10.00	16.5	18.5	6.90	7.45
HSB-1890-150M-MN	15.00	14.0	14.0	9.00	9.72
HSB-1890-220M-MN	22.00	11.0	11.0	14.60	15.77
HSB-1890-330M-MN	33.00	8.5	9.0	21.70	23.44
HSB-1890-470M-MN	47.00	6.8	7.0	33.50	36.18
HSB-2212-3R3M-MN	3.30	29.0	45.0	1.70	1.87
HSB-2212-6R8M-MN	6.80	28.5	31.0	2.10	2.31
HSB-2212-8R2M-MN	8.20	25.5	30.0	2.70	2.97
HSB-2212-100M-MN	10.00	21.0	26.0	3.40	3.74
HSB-2212-120M-MN	12.00	19.0	25.0	4.30	4.73
HSB-2212-220M-MN	22.00	15.0	18.0	7.00	7.70
HSB-2212-330M-MN	33.00	11.5	15.0	13.20	14.52
HSB-2212-470M-MN	47.00	9.0	12.0	19.20	21.12
HSB-2212-680M-MN	68.00	7.5	9.5	27.30	30.03
HSB-2212-820M-MN	82.00	7.0	8.5	30.40	33.44

NOTE:

- All test data is referenced to 25°C ambient.
- I_{rms}: DC current(A) that will cause an approximate Δ T of 50°C .
- I_{sat}: DC current(A) that will cause L_o to drop approximate 30%.
- Operating temperature range is -40°C to 125°C .
- The part temperature(ambient and temp rise) should not exceed 125°C under worse case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.

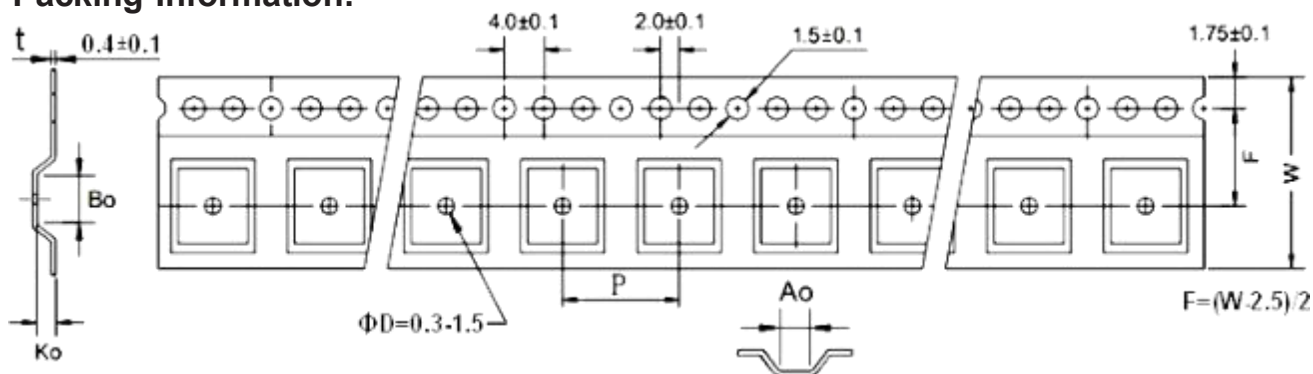
Packing Information:



(unit: mm)

Series	TYPE	A(Re .)	B(Re .)	C(Re .)	D(Re .)	E(Re .)	G(Re .)	G2(Ref.)
HSB-0540	13**12mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	12.5±0.5	16.5±0.5
HSB-0630	13**16mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	16.5±0.5	20.5±0.5
HSB-0640	13**16mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	16.5±0.5	20.5±0.5
HSB-0650	13**16mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	16.5±0.5	20.5±0.5
HSB-1030	13**24mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	24.5±0.5	28.5±0.5
HSB-1040	13**24mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	24.5±0.5	28.5±0.5
HSB-1050	13**24mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	24.5±0.5	28.5±0.5
HSB-1335	13**24mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	24.5±0.5	28.5±0.5
HSB-1350	13**24mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	24.5±0.5	28.5±0.5
HSB-1365	13**24mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	24.5±0.5	28.5±0.5
HSB-1890	13**32mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	32.5±0.5	37±0.5
HSB-2212	13**44mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	44.5±0.5	49±0.5

Packing Information:



(unit: mm)

Series	QTY (Pcs/Reel)	Ao	Bo	Ko	W	P	
HSB-0540	1500	5.6	6.00	4.2	12	8	5.5
HSB-0630	1500	7.2	7.80	3.5	16	12	7.5
HSB-0640	1000	7.2	7.80	4.2	16	12	7.5
HSB-0650	1000	7.2	7.80	5.2	16	12	7.5
HSB-1030	1000	10.8	11.30	3.5	24	16	11.5
HSB-1040	1000	10.8	11.30	4.2	24	16	11.5
HSB-1050	800	10.8	11.30	5.2	24	16	11.5
HSB-1335	600	13.5	14.00	3.7	24	16	11.5
HSB-1350	500	13.5	14.00	5.2	24	16	11.5
HSB-1365	500	13.5	14.00	6.7	24	16	11.5
HSB-1890	250	18.8	19.40	9.5	32	24	14.2
HSB-2212	120	23.1	23.65	12.8	44	32	20.2

Typical Pulling Force: 10-130 grams

