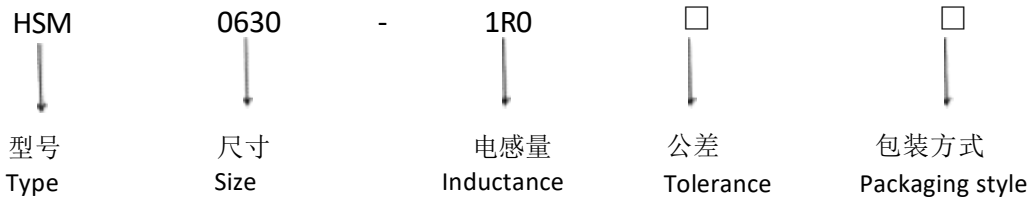
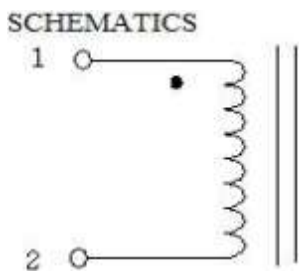


Descripyion	Model	P/N	Package Size	Inductance Range(uH)	Page
Moiding Type High Current Power Inductor		HSM Series	0412	0.10-4.70	
			0415	0.10-4.70	
			0420	0.10-22.0	
			0515	0.10-4.70	
			0518	0.10-10.0	
			0520	0.10-10.0	
			0530	0.10-22.0	
			0615	0.10-4.70	
			0618	0.10-10.0	
			0620	0.10-10.0	
			0624	0.10-22.0	
			0630	0.10-47.0	
			0640	0.15-47.0	
			0650	0.22-100.0	
			0830	0.15-47.0	
			0840	0.15-47.0	
			0850	0.22-100.0	
			1030	0.15-33.0	
			1040	0.15-100.0	
			1050	0.15-150.0	
			1070	0.22-150.0	
			1080	0.22-220.0	
			1235	0.22-22.0	
			1240	0.22-22.0	
			1250	0.22-100.0	
			1260	0.22-150.0	
			1265	0.22-220.0	
			1770	1.0-220.0	

1, 产品标识 Product Identification



2, 电路原理 Electrical Schematics



3, 产品图片 Product images



4, 产品特点 Features

Lowest molded height (1.0 mm) in this package Footprint.

Frequency range up to 5.0 MHz

Lowest DCR/ μ H, in this package size

Handles high transient current spikes without saturation

Ultra low buzz noise, due to composite construction

Encapsulated body offers improved environmental protection and moisture

Compliant to RoHSMM directive 2002/95/EC

5, 产品应用 Applications

PDA/notebook/desktop/server applications

High current POL converters

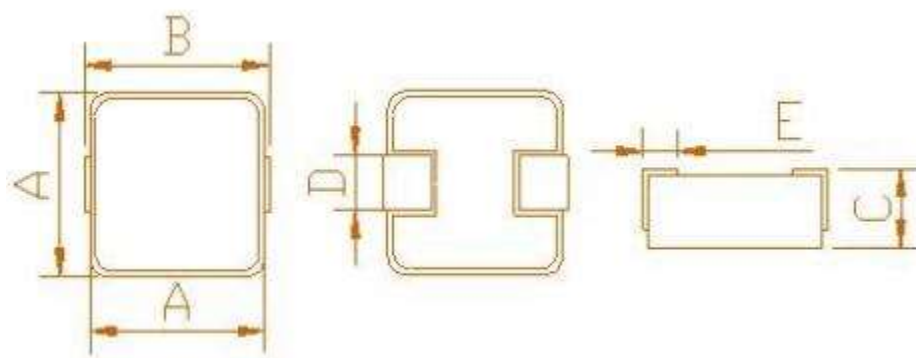
Low profile, high current power supplies

Battery powered devices

DC/DC converters in distributed power systems

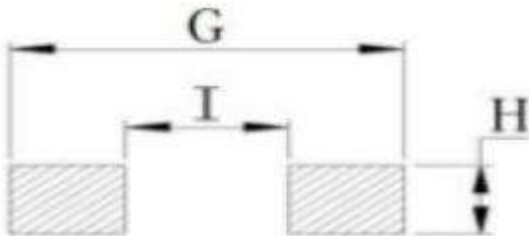
DC/DC converter for Field Programmable Gate Array

6, 产品外形及尺寸 Shapes & Dimensions (Unit:mm)



产品型号	A	B	C	D	E
HSM0412	4.0 ± 0.2	4.4 ± 0.35	1.0 ± 0.2	1.5 ± 0.3	0.8 ± 0.3
HSM0415	4.0 ± 0.2	4.4 ± 0.35	1.3 ± 0.2	1.5 ± 0.3	0.8 ± 0.3
HSM0420	4.0 ± 0.2	4.4 ± 0.35	1.8 ± 0.2	1.5 ± 0.3	0.8 ± 0.3
HSM0515	5.2 ± 0.2	5.4 ± 0.35	1.3 ± 0.2	2.2 ± 0.3	1.2 ± 0.3
HSM0518	5.2 ± 0.2	5.4 ± 0.35	1.6 ± 0.2	2.2 ± 0.3	1.2 ± 0.3
HSM0520	5.2 ± 0.2	5.4 ± 0.35	1.8 ± 0.2	2.2 ± 0.3	1.2 ± 0.3
HSM0530	5.2 ± 0.2	5.4 ± 0.35	2.8 ± 0.2	2.2 ± 0.3	1.2 ± 0.3
HSM0630	6.6 ± 0.2	7.3 ± 0.35	2.8 ± 0.2	3.0 ± 0.3	1.6 ± 0.3
HSM0640	6.6 ± 0.2	7.3 ± 0.35	3.8 ± 0.2	3.0 ± 0.3	1.6 ± 0.3
HSM0650	6.6 ± 0.2	7.3 ± 0.35	4.8 ± 0.2	3.0 ± 0.3	1.6 ± 0.3
HSM0840	8.0 ± 0.5	8.5 ± 0.50	3.8 ± 0.2	3.0 ± 0.3	2.3 ± 0.3
HSM0850	8.0 ± 0.5	8.5 ± 0.50	4.8 ± 0.2	3.0 ± 0.3	2.3 ± 0.3
HSM1030	10.0 ± 0.2	11.0 ± 0.5	2.8 ± 0.2	3.0 ± 0.3	2.3 ± 0.3
HSM1040	10.0 ± 0.2	11.0 ± 0.5	3.8 ± 0.2	3.0 ± 0.3	2.3 ± 0.3
HSM1050	10.0 ± 0.2	11.0 ± 0.5	4.8 ± 0.2	3.0 ± 0.3	2.3 ± 0.3
HSM1070	10.0 ± 0.2	11.0 ± 0.5	6.8 ± 0.2	3.0 ± 0.3	2.3 ± 0.3
HSM1080	10.0 ± 0.2	11.0 ± 0.5	7.8 ± 0.2	3.0 ± 0.3	2.3 ± 0.3
HSM1250	12.8 ± 0.2	13.2 ± 0.5	4.8 ± 0.2	3.8 ± 0.3	2.5 ± 0.5
HSM1265	12.8 ± 0.2	13.2 ± 0.5	6.2 ± 0.3	3.8 ± 0.3	2.5 ± 0.5
HSM1770	17.0 ± 0.5	18.0 ± 0.5	6.5 ± 0.5	11.8 ± 0.3	2.8 ± 0.5

7，推荐焊盘尺寸 Recommend The Bonding Pad Size



产品型号	G（参考值）	H（参考值）	I（参考值）
HSM0412/0415/0420	5.2	2.50	2.2
HSM0515/0518/0520/0530	6.0	2.50	2.2
HSM0618/0620/0624/0630/0640/0650	8.4	3.50	3.7
HSM0840/0850	10.0	4.00	3.7
HSM1030/1040/1050	13.6	4.10	5.4
HSM1070/1080	13.6	4.10	5.4
HSM1235/1240/1250/1265	14.5	5.00	6.0
HSM1770	20.0	14.50	10.0

: The above sizes are for reference only

8，印字 Marking

The inductor is marked with a 3-digit code
Example:1.0uH-1R0



9, 电气特性 Electrical Characteristics

HSM0412 Series

Part Number	Inductance L0 (uH±20%)	DCR (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps
	100KHz/1V 0A	Typical	Maximum	IDC (A)	Isat (A)
HSM0412-R15M□	0.15	7.6	9.0	6.8	12
HSM0412-R22M□	0.22	9.2	11.0	6.5	9.0
HSM0412-R33M□	0.33	15.6	19.0	5.7	6.8
HSM0412-R47M□	0.47	18.3	21.0	5.2	5.4
HSM0412-R68M□	0.68	30.5	36.0	4.2	4.8
HSM0412-1R0M□	1.0	40.6	47.0	3.8	4.4
HSM0412-1R5M□	1.5	68.3	75.0	2.7	3.2
HSM0412-2R2M□	2.2	76.8	84.0	2.2	2.4
HSM0412-3R3M□	3.3	145.6	160.0	1.7	2.3
HSM0412-4R7M□	4.7	169.8	190.0	1.4	1.8

HSM0415 Series

Part Number	Inductance L0 (uH±20%)	DCR (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps
	100KHz/1V 0A	Typical	Maximum	IDC (A)	Isat (A)
HSM0415-1R0M□	1.0	38.0	46.0	4.8	6.8
HSM0415-1R5M□	1.5	42.5	51.0	4.3	5.0
HSM0415-2R2M□	2.2	64.0	70.0	3.0	4.3
HSM0415-4R7M□	4.7	123.0	135.0	2.0	3.0

HSM0420 Series

Part Number	Inductance L0 (uH±20%)	DCR (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps
	100KHz/1V 0A	Typical	Maximum	IDC (A)	Isat (A)
HSM0420-R47M□	0.47	9.5	14.0	7.0	11.5
HSM0420-1R0M□	1.0	24.6	28.0	6.0	10.5
HSM0420-1R5M□	1.5	27.7	35.0	4.0	6.0
HSM0420-2R2M□	2.2	54.1	58.0	4.5	5.0
HSM0420-3R3M□	3.3	62.6	70.0	4.0	4.5
HSM0420-4R7M□	4.7	91.4	96.0	3.5	3.0
HSM0420-5R6M□	5.6	107.6	115.0	2.0	3.5
HSM0420-6R8M□	6.8	144.6	150.0	2.5	2.6
HSM0420-100M□	10.0	260.4	270.0	1.5	2.5
HSM0420-220M□	22.0	336.1	360.0	1.5	1.8

HSM0515 Series

Part Number	Inductance LO (uH±20%)	DCR (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps
	100KHz/1V 0A	Typical	Maximum	IDC (A)	Isat (A)
HSM0515-R10M□	0.10	3.5	4.2	10.0	16.0
HSM0515-R47M□	0.47	10.0	12.0	9.0	11.0
HSM0515-1R0M□	1.0	28.0	34.0	4.7	5.5
HSM0515-2R2M□	2.2	73.0	80.0	3.0	4.0
HSM0515-3R3M□	3.3	100.0	110.0	2.5	3.0
HSM0515-4R7M□	4.7	128.0	140.0	2.2	2.5

HSM0518 Series

Part Number	Inductance LO (uH±20%)	DCR (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps
	100KHz/1V 0A	Typical	Maximum	IDC (A)	Isat (A)
HSM0518-R47M□	0.47	10.0	12.0	9.0	10.0
HSM0518-R68M□	0.68	12.0	13.5	8.0	9.5
HSM0518-1R0M□	1.0	17.0	20.0	6.5	7.5
HSM0518-1R5M□	1.5	28.0	34.0	5.0	7.0
HSM0518-2R2M□	2.2	34.0	42.0	4.6	6.5
HSM0518-3R3M□	3.3	76.0	84.0	2.8	4.5
HSM0518-4R7M□	4.7	84.0	92.0	2.6	4.0
HSM0518-6R8M□	6.8	148.0	163.0	2.0	3.5
HSM0518-100M□	10.0	165.0	182.0	1.8	3.0

HSM0520 Series

Part Number	Inductance LO (uH±20%)	DCR (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps
	100KHz/1V 0A	Typical	Maximum	IDC (A)	Isat (A)
HSM0520-R10M□	0.10	3.3	4.0	15.0	18.0
HSM0520-R22M□	0.22	4.4	5.3	11.5	14.0
HSM0520-R47M□	0.47	10.0	12.0	9.0	11.0
HSM0520-R68M□	0.68	12.5	15.0	8.5	10.0
HSM0520-1R0M□	1.0	17.0	20.0	7.0	8.5
HSM0520-1R5M□	1.5	26.0	31.0	5.5	7.5
HSM0520-2R2M□	2.2	34.0	43.0	5.0	6.5
HSM0520-3R3M□	3.3	58.0	64.0	3.0	5.5
HSM0520-4R7M□	4.7	84.0	92.0	2.8	4.5
HSM0520-6R8M□	6.8	124.0	136.0	2.2	3.8
HSM0520-100M□	10.0	165.0	182.0	2.0	3.0

HSM0530 Series

Part Number	Inductance LO ($\mu\text{H} \pm 20\%$)	DCR ($\text{m}\Omega$)		Heat Rating Current DC Amps	Saturation Current DC Amps
	100KHz/1V 0A	Typical	Maximum	IDC (A)	Isat (A)
HSM0530-R10M□	0.10	2.5	3.0	23.0	26.0
HSM0530-R22M□	0.22	3.6	4.0	13.0	18.0
HSM0530-R47M□	0.47	8.5	10.0	11.0	15.0
HSM0530-R68M□	0.68	10.5	12.0	9.0	11.2
HSM0530-1R0M□	1.0	11.6	14.0	7.0	8.5
HSM0530-1R5M□	1.5	18.6	25.0	6.5	8.0
HSM0530-2R2M□	2.2	25.2	30.0	6.0	7.5
HSM0530-3R3M□	3.3	38.0	45.0	5.0	6.5
HSM0530-4R7M□	4.7	52.5	60.0	4.5	6.0
HSM0530-6R8M□	6.8	77.0	95.0	3.0	4.5
HSM0530-100M□	10.0	115.0	130.0	3.0	4.0
HSM0530-150M□	15.0	159.0	165.0	2.5	3.0
HSM0530-220M□	22.0	224.0	270.0	2.0	2.5

HSM0615 Series

Part Number	Inductance LO ($\mu\text{H} \pm 20\%$)	DCR ($\text{m}\Omega$)		Heat Rating Current DC Amps	Saturation Current DC Amps
	100KHz/1V 0A	Typical	Maximum	IDC (A)	Isat (A)
HSM0615-R47M□	0.47	7.6	8.5	9.0	14.0
HSM0615-R68M□	0.68	10.0	12.0	7.5	11.0
HSM0615-1R0M□	1.0	17.0	21.0	5.3	8.0
HSM0615-1R5M□	1.5	35.0	40.0	4.5	7.0
HSM0615-2R2M□	2.2	48.0	54.0	3.5	6.5
HSM0615-3R3M□	3.3	56.0	63.0	3.1	4.5
HSM0615-4R7M□	4.7	78.5	85.0	2.8	3.5
HSM0615-6R8M□	6.8	126.0	135.0	2.2	3.5
HSM0615-100M□	10.0	165.0	175.0	1.8	3.0

HSM0618 Series

Part Number	Inductance LO ($\mu\text{H} \pm 20\%$)	DCR ($\text{m}\Omega$)		Heat Rating Current DC Amps	Saturation Current DC Amps
	100KHz/1V 0A	Typical	Maximum	IDC (A)	Isat (A)
HSM0618-R22M□	0.22	3.5	4.0	14.0	23.0
HSM0618-R47M□	0.47	7.0	8.5	10.5	18.0
HSM0618-1R0M□	1.0	15.0	18.0	7.5	11.0
HSM0618-1R5M□	1.5	24.0	29.0	6.5	9.0
HSM0618-2R2M□	2.2	34.0	40.0	4.5	7.5
HSM0618-3R3M□	3.3	47.0	56.0	4.0	6.5
HSM0618-4R7M□	4.7	65.0	72.0	3.8	5.0
HSM0618-6R8M□	6.8	94.0	105.0	3.0	4.2
HSM0618-100M□	10.0	149.0	164.0	2.2	3.4

HSM0620 Series

Part Number	Inductance LO (uH±20%)	DCR (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps
	100KHz/1V 0A	Typical	Maximum	IDC (A)	Isat (A)
HSM0620-R15M□	0.15	2.2	2.8	20.0	28.0
HSM0620-R47M□	0.47	6.8	8.2	12.0	18.0
HSM0620-1R0M□	1.0	15.0	18.0	8.0	12.0
HSM0620-1R5M□	1.5	21.5	25.0	6.5	1.0
HSM0620-2R2M□	2.2	30.0	36.0	5.0	8.5
HSM0620-3R3M□	3.3	47.0	56.0	4.0	6.5
HSM0620-4R7M□	4.7	65.0	72.0	3.8	5.0
HSM0620-6R8M□	6.8	94.0	105.0	3.0	4.0
HSM0620-100M□	10.0	145.0	155.0	2.2	3.4

HSM0624 Series

Part Number	Inductance LO (uH±20%)	DCR (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps
	100KHz/1V 0A	Typical	Maximum	IDC (A)	Isat (A)
HSM0624-R15M□	0.15	1.9	2.3	24.0	38.0
HSM0624-R22M□	0.22	2.4	3.0	19.0	24.0
HSM0624-R47M□	0.47	4.6	5.1	13.5	16.0
HSM0624-R68M□	0.68	6.1	7.0	10.5	12.8
HSM0624-1R0M□	1.0	11.4	13.5	8.0	12.0
HSM0624-1R5M□	1.5	16.5	20.0	7.0	10.8
HSM0624-2R2M□	2.2	21.5	28.0	6.2	8.0
HSM0624-3R3M□	3.3	32.0	39.0	4.8	6.4
HSM0624-4R7M□	4.7	44.2	50.0	4.3	5.2
HSM0624-6R8M□	6.8	64.2	70.0	3.2	4.8
HSM0624-100M□	10.0	84.5	101.0	2.4	3.2
HSM0624-150M□	15.0	133.0	160.0	2.0	2.6
HSM0624-220M□	22.0	195.0	230.0	1.6	2.0

HSM0630 Series

Part Number	Inductance LO ($\mu\text{H} \pm 20\%$)	DCR ($\text{m}\Omega$)		Heat Rating Current DC Amps	Saturation Current DC Amps
	100KHz/1V 0A	Typical	Maximum	IDC (A)	Isat (A)
HSM0630-R10M□	0.10	0.9	1.2	32.0	45.0
HSM0630-R15M□	0.15	1.1	1.5	28.0	35.0
HSM0630-R22M□	0.22	2.2	2.6	24.0	32.0
HSM0630-R24M□	0.24	2.5	3.1	22.0	30.0
HSM0630-R33M□	0.33	3.3	4.0	19.0	28.0
HSM0630-R47M□	0.47	3.5	4.2	18.0	22.0
HSM0630-R68M□	0.68	4.8	5.8	15.0	21.0
HSM0630-R82M□	0.82	5.6	6.7	14.0	19.0
HSM0630-1R0M□	1.0	7.7	8.5	12.0	18.0
HSM0630-1R5M□	1.5	12.9	15.0	6.5	15.0
HSM0630-2R2M□	2.2	16.7	20.0	7.0	12.0
HSM0630-3R3M□	3.3	30.0	35.0	6.0	13.0
HSM0630-4R7M□	4.7	29.8	36.0	5.0	8.0
HSM0630-5R6M□	5.6	54.4	58.0	5.0	7.0
HSM0630-6R8M□	6.8	48.4	55.0	5.0	6.5
HSM0630-8R2M□	8.2	69.0	75.0	4.2	5.5
HSM0630-100M□	10.0	59.7	65.0	4.5	5.5
HSM0630-150M□	15.0	122.4	130.0	3.0	3.5
HSM0630-220M□	22.0	148.1	155.0	2.5	3.5
HSM0630-330M□	33.0	235.2	270.0	2.2	2.5
HSM0630-470M□	47.0	323.2	335.0	2.0	2.5

HSM0640 Series

Part Number	Inductance LO ($\mu\text{H} \pm 20\%$)	DCR ($\text{m}\Omega$)		Heat Rating Current DC Amps	Saturation Current DC Amps
	100KHz/1V 0A	Typical	Maximum	IDC (A)	Isat (A)
HSM0640-R68M□	0.47	4.0	4.8	16.0	18.0
HSM0640-1R0M□	1.0	5.7	6.6	13.5	16.0
HSM0640-1R5M□	1.5	8.5	10.0	12.5	13.5
HSM0640-2R2M□	2.2	11.2	14.0	8.5	11.0
HSM0640-3R3M□	3.3	15.5	20.0	8.0	9.0
HSM0640-4R7M□	4.7	24.6	30.0	6.0	6.5
HSM0640-6R8M□	6.8	38.2	45.0	5.0	6.0
HSM0640-100M□	10.0	58.0	65.0	4.0	5.0
HSM0640-150M□	15.0	78.9	95.0	3.2	4.0
HSM0640-220M□	22.0	115.5	125.0	3.0	3.5
HSM0640-330M□	33.0	210.5	240.0	2.5	3.0
HSM0640-470M□	47.0	270.5	320.0	2.4	2.8

HSM0650 Series

Part Number	Inductance LO (uH±20%)	DCR (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps
	100KHz/1V 0A	Typical	Maximum	IDC(A)	Isat (A)
HSM0650-R10M□	0.10	0.9	1.1	32.0	60.0
HSM0650-R22M□	0.22	1.7	2.6	23.0	40.0
HSM0650-R33M□	0.33	3.2	3.9	18.0	33.0
HSM0650-R47M□	0.47	3.5	4.5	21.0	27.0
HSM0650-R68M□	0.68	5.4	6.0	15.0	25.0
HSM0650-1R0M□	1.0	4.8	6.0	15.0	16.0
HSM0650-1R5M□	1.5	8.6	10.0	8.0	13.0
HSM0650-2R2M□	2.2	10.3	14.0	8.0	14.0
HSM0650-3R3M□	3.3	16.2	20.0	7.0	9.0
HSM0650-4R7M□	4.7	26.6	30.0	7.0	11.0
HSM0650-6R8M□	6.8	33.0	38.0	6.0	8.0
HSM0650-8R2M□	8.2	69.0	75.0	4.0	7.0
HSM0650-100M□	10.0	40.0	45.0	6.0	7.0
HSM0650-150M□	15.0	88.2	95.0	4.0	6.5
HSM0650-220M□	22.0	110.0	115.0	3.5	5.0
HSM0650-330M□	33.0	165.0	180.0	2.4	3.2
HSM0650-470M□	47.0	234.0	245.0	2.5	3.0
HSM0650-680M□	68.0	301.0	305.0	2.0	2.5
HSM0650-101M□	100.0	452.0	465.0	1.6	2.2

HSM0840 Series

Part Number	Inductance LO (uH±20%)	DCR (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps
	100KHz/1V 0A	Typical	Maximum	IDC(A)	Isat (A)
HSM0840-R15M□	0.15	1.2	1.6	33.0	60.0
HSM0840-R22M□	0.22	1.5	1.8	30.0	55.0
HSM0840-R47M□	0.47	2.3	2.8	25.0	36.0
HSM0840-R68M□	0.68	3.2	3.8	22.0	24.0
HSM0840-R82M□	0.82	3.8	4.4	19.0	20.0
HSM0840-1R0M□	1.0	4.1	4.8	17.0	18.0
HSM0840-1R5M□	1.5	6.8	7.6	15.0	16.0
HSM0840-2R2M□	2.2	10.5	12.5	12.5	14.0
HSM0840-3R3M□	3.3	12.2	15.0	10.0	12.0
HSM0840-4R7M□	4.7	23.6	27.0	8.5	11.0
HSM0840-6R8M□	6.8	30.5	36.5	7.5	8.5
HSM0840-100M□	10.0	54.0	59.0	5.5	7.0
HSM0840-150M□	15.0	65.0	71.0	4.8	5.0
HSM0840-220M□	22.0	101.0	113.0	4.2	4.5
HSM0840-330M□	33.0	126.0	156.0	3.0	3.5
HSM0840-470M□	47.0	197.0	225.0	2.0	3.0

HSM0850 Series

Part Number	Inductance LO (uH±20%)	DCR (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps
	100KHz/1V 0A	Typical	Maximum	IDC (A)	Isat (A)
HSM0850-R15M□	0.15	0.6	0.7	38.0	58.0
HSM0850-R22M□	0.22	0.8	1.0	30.0	53.0
HSM0850-R47M□	0.47	2.5	2.9	23.0	30.0
HSM0850-R68M□	0.68	3.6	4.2	18.0	24.0
HSM0850-R82M□	0.82	4.0	4.8	17.0	23.0
HSM0850-1R0M□	1.0	4.1	4.8	16.0	19.0
HSM0850-1R5M□	1.5	4.9	5.7	14.0	19.0
HSM0850-2R2M□	2.2	8.4	10.0	13.0	15.0
HSM0850-3R3M□	3.3	11.5	15.0	11.0	14.0
HSM0850-4R7M□	4.7	18.3	25.0	8.0	13.0
HSM0850-5R6M□	5.6	24.0	30.0	8.0	13.0
HSM0850-6R8M□	6.8	33.8	38.0	7.5	10.5
HSM0850-100M□	10.0	33.3	38.0	6.0	9.0
HSM0850-150M□	15.0	45.8	52.0	5.5	7.0
HSM0850-220M□	22.0	74.5	82.0	3.8	6.0
HSM0850-330M□	33.0	129.5	140.0	3.5	5.5
HSM0850-470M□	47.0	166.8	190.0	2.5	3.8
HSM0850-680M□	68.0	169.3	185.0	2.0	3.5

HSM1030 Series

Part Number	Inductance LO (uH±20%)	DCR (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps
	100KHz/1V 0A	Typical	Maximum	IDC (A)	Isat (A)
HSM1030-R22M□	0.22	0.9	1.2	30.0	40.0
HSM1030-R33M□	0.33	1.3	1.6	23.0	30.0
HSM1030-R47M□	0.47	3.1	3.6	20.0	28.0
HSM1030-1R0M□	1.0	6.0	6.8	13.0	22.0
HSM1030-1R5M□	1.5	7.1	8.5	11.0	18.0
HSM1030-2R2M□	2.2	11.3	13.0	10.0	16.0
HSM1030-3R3M□	3.3	15.9	18.0	8.5	13.0
HSM1030-4R7M□	4.7	23.2	26.0	7.0	11.0
HSM1030-6R8M□	6.8	42.0	49.0	5.0	9.0
HSM1030-100M□	10.0	54.0	62.0	4.5	7.0
HSM1030-150M□	15.0	68.3	88.0	4.0	6.0
HSM1030-220M□	22.0	93.0	102.0	3.0	5.5
HSM1030-330M□	33.0	125.0	137.0	2.0	3.5

HSM1040 Series

Part Number	Inductance LO (uH±20%)	DCR (mΩ)		Heat Rating Current DC Amps	Saturation Current DC Amps
	100KHz/1V 0A	Typical	Maximum	IDC (A)	Isat (A)
HSM1040-R15M□	0.15	0.6	0.8	45.0	60.0
HSM1040-R22M□	0.22	0.9	1.2	35.0	50.0
HSM1040-R36M□	0.36	1.1	1.5	31.0	45.0
HSM1040-R47M□	0.47	1.5	1.8	30.0	42.0
HSM1040-R56M□	0.56	1.7	2.3	24.0	38.0
HSM1040-R68M□	0.68	2.1	2.5	22.0	35.0
HSM1040-R82M□	0.82	2.9	3.3	16.0	32.0
HSM1040-1R0M□	1.0	3.3	4.0	15.0	30.0
HSM1040-1R5M□	1.5	5.1	6.0	14.0	24.0
HSM1040-2R2M□	2.2	6.4	7.0	13.0	20.0
HSM1040-3R3M□	3.3	10.5	15.0	12.0	17.0
HSM1040-4R7M□	4.7	12.8	16.5	9.5	13.0
HSM1040-5R6M□	5.6	18.3	25.0	8.0	14.0
HSM1040-6R8M□	6.8	22.6	28.0	8.0	11.0
HSM1040-8R2M□	8.2	22.0	29.0	8.0	11.0
HSM1040-100M□	10.0	29.8	38.0	7.0	9.5
HSM1040-150M□	15.0	42.4	55.0	4.0	7.0
HSM1040-220M□	22.0	66.9	80.0	5.0	6.0
HSM1040-330M□	33.0	94.2	110.0	3.5	5.5
HSM1040-470M□	47.0	138.7	155.0	3.5	6.5
HSM1040-680M□	68.0	170.8	190.0	2.5	3.5
HSM1040-101M□	100.0	299.8	325.0	2.2	2.8

HSM1050 Series

Part Number	Inductance LO ($\mu\text{H} \pm 20\%$)	DCR ($\text{m}\Omega$)		Heat Rating Current DC Amps	Saturation Current DC Amps
	100KHz/1V 0A	Typical	Maximum	IDC (A)	Isat (A)
HSM1050-R22M□	0.22	0.7	0.9	35.0	57.0
HSM1050-R68M□	0.68	1.7	2.0	30.0	42.0
HSM1050-1R0M□	1.0	3.2	3.8	18.0	26.0
HSM1050-1R5M□	1.5	4.3	5.2	15.0	21.0
HSM1050-2R2M□	2.2	4.7	5.5	12.0	20.0
HSM1050-3R3M□	3.3	9.0	13.0	11.0	18.0
HSM1050-4R7M□	4.7	11.5	15.0	10.0	14.5
HSM1050-5R6M□	5.6	15.1	18.0	9.5	14.0
HSM1050-6R8M□	6.8	16.2	22.0	9.0	13.0
HSM1050-100M□	10.0	29.8	35.0	7.0	10.0
HSM1050-150M□	15.0	38.0	50.0	7.0	9.0
HSM1050-220M□	22.0	45.8	60.0	6.0	7.5
HSM1050-330M□	33.0	65.7	80.0	4.5	6.5
HSM1050-470M□	47.0	100.9	125.0	2.8	4.0
HSM1050-680M□	68.0	176.8	220.0	3.0	4.0
HSM1050-101M□	100.0	215.3	260.0	2.2	3.2
HSM1050-151M□	150.0	365.0	400.0	1.5	2.0

HSM1070 Series

Part Number	Inductance LO ($\mu\text{H} \pm 20\%$)	DCR ($\text{m}\Omega$)		Heat Rating Current DC Amps	Saturation Current DC Amps
	100KHz/1V 0A	Typical	Maximum	IDC (A)	Isat (A)
HSM1070-4R7M□	4.7	6.92	7.5	13.5	16.5
HSM1070-6R8M□	6.8	13.09	15.0	9.0	16.0
HSM1070-150M□	15.0	27.35	32.0	7.0	12.5
HSM1070-220M□	22.0	33.58	38.0	7.0	10.0

HSM1080 Series

Part Number	Inductance LO ($\mu\text{H} \pm 20\%$)	DCR ($\text{m}\Omega$)		Heat Rating Current DC Amps	Saturation Current DC Amps
	100KHz/1V 0A	Typical	Maximum	IDC (A)	Isat (A)
HSM1080-220M□	22.0	28.12	35.0	7.5	10.0
HSM1080-330M□	33.0	48.16	55.0	6.0	9.0
HSM1080-221M□	220.0	421.50	440.0	1.5	2.2

HSM1235 Series

Part Number	Inductance LO ($\mu\text{H} \pm 20\%$)	DCR ($\text{m}\Omega$)		Heat Rating Current DC Amps	Saturation Current DC Amps
	100KHz/1V 0A	Typical	Maximum	IDC (A)	Isat (A)
HSM1235-R68M□	0.68	2.0	2.4	23.0	38.0
HSM1235-1R0M□	1.0	2.9	3.5	17.0	34.0
HSM1235-1R5M□	1.5	4.4	5.3	15.0	28.0
HSM1235-2R2M□	2.2	5.0	6.0	14.0	18.0
HSM1235-100M□	10.0	35.0	42.0	6.0	7.0
HSM1235-220M□	22.0	65.0	71.5	4.5	6.5

HSM1240 Series

Part Number	Inductance LO ($\mu\text{H} \pm 20\%$)	DCR ($\text{m}\Omega$)		Heat Rating Current DC Amps	Saturation Current DC Amps
	100KHz/1V 0A	Typical	Maximum	IDC (A)	Isat (A)
HSM1240-R68M□	0.68	2.0	2.4	23.0	38.0
HSM1240-1R0M□	1.0	2.9	3.5	17.0	34.0
HSM1240-1R5M□	1.5	4.4	5.3	15.0	28.0
HSM1240-2R2M□	2.2	5.0	6.0	14.0	18.0
HSM1240-3R3M□	3.3	11.2	13.0	13.0	16.8
HSM1240-4R7M□	4.7	12.6	14.5	11.0	14.5
HSM1240-6R8M□	6.8	15.5	20.0	8.0	11.5
HSM1240-100M□	10.0	21.5	25.0	7.0	8.0
HSM1240-150M□	15.0	33.0	39.0	5.8	6.5
HSM1240-220M□	22.0	45.0	51.0	3.8	5.0

HSM1250 Series

Part Number	Inductance LO ($\mu\text{H} \pm 20\%$)	DCR ($\text{m}\Omega$)		Heat Rating Current DC Amps	Saturation Current DC Amps
	100KHz/1V 0A	Typical	Maximum	IDC (A)	Isat (A)
HSM1250-R68M□	0.68	1.3	1.6	37.0	60.0
HSM1250-1R0M□	1.0	2.1	2.5	29.0	49.0
HSM1250-1R5M□	1.5	3.1	3.6	24.5	44.0
HSM1250-2R2M□	2.2	4.1	4.8	21.0	33.0
HSM1250-3R3M□	3.3	5.4	6.3	18.5	27.0
HSM1250-4R7M□	4.7	9.2	10.5	14.0	23.0
HSM1250-6R8M□	6.8	14.1	17.0	11.0	19.0
HSM1250-100M□	10.0	19.0	22.0	9.5	16.5
HSM1250-150M□	15.0	32.8	38.0	7.0	13.5
HSM1250-220M□	22.0	44.8	52.0	6.0	9.5
HSM1250-330M□	33.0	63.9	74.0	5.0	8.0
HSM1250-470M□	47.0	95.3	110.0	4.0	7.0
HSM1250-680M□	68.0	144.2	165.0	3.3	6.0

HSM1265 Series

Part Number	Inductance LO ($\mu\text{H} \pm 20\%$)	DCR ($\text{m}\Omega$)		Heat Rating Current DC Amps	Saturation Current DC Amps
	100KHz/1V 0A	Typical	Maximum	IDC (A)	Isat (A)
HSM1265-R68M□	0.68	1.1	1.4	38.0	60.0
HSM1265-1R0M□	1.0	1.6	2.0	34.0	54.0
HSM1265-1R5M□	1.5	2.4	3.2	26.0	45.0
HSM1265-2R2M□	2.2	3.6	4.3	22.0	38.0
HSM1265-3R3M□	3.3	4.8	5.7	19.0	27.0
HSM1265-4R7M□	4.7	6.1	7.2	17.0	24.0
HSM1265-6R8M□	6.8	9.1	11.0	14.0	20.5
HSM1265-100M□	10.0	15.0	18.0	11.0	17.0
HSM1265-150M□	15.0	27.5	32.0	7.8	14.5
HSM1265-220M□	22.0	32.7	38.0	7.0	10.5
HSM1265-330M□	33.0	46.5	53.0	6.0	8.5
HSM1265-470M□	47.0	63.1	72.0	5.0	7.5
HSM1265-680M□	68.0	105.1	120.0	3.8	6.0
HSM1265-101M□	100.0	150.4	170.0	3.0	5.0

HSM1770 Series

Part Number	Inductance LO ($\mu\text{H} \pm 20\%$)	DCR ($\text{m}\Omega$)		Heat Rating Current DC Amps	Saturation Current DC Amps
	100KHz/1V 0A	Typical	Maximum	IDC (A)	Isat (A)
HSM1770-1R0M□	1.0	1.28	1.35	48.0	60.0
HSM1770-1R5M□	1.5	1.78	1.88	42.0	60.0
HSM1770-2R2M□	2.2	2.40	2.53	35.0	55.0
HSM1770-3R3M□	3.3	3.68	3.88	28.0	50.0
HSM1770-4R7M□	4.7	4.84	5.11	25.0	41.0
HSM1770-6R8M□	6.8	8.37	8.83	19.0	32.0
HSM1770-100M□	10.0	11.60	12.00	16.5	25.0
HSM1770-150M□	15.0	18.80	19.90	12.5	23.0
HSM1770-220M□	22.0	25.10	26.50	11.0	20.0
HSM1770-330M□	33.0	34.00	38.00	8.5	13.0
HSM1770-470M□	47.0	53.00	58.00	6.5	11.0
HSM1770-680M□	68.0	89.00	100.00	5.0	9.0
HSM1770-101M□	100.0	125.00	140.00	4.2	7.0

(1) Tolerance of Inductance: N=±30%, M=±20%, K=±10%.

(2) All test data is referenced to 25±2℃ ambient.

(3) The test condition of inductance value is 100KHz and 1V.

(4) Operating Temperature Range -40℃ to +125℃.

(5) DC current (Irms)(A) that will cause an approximate ΔT of 40℃.

(6) DC current (Isat)(A) that will cause Lo to drop approximately 30%.

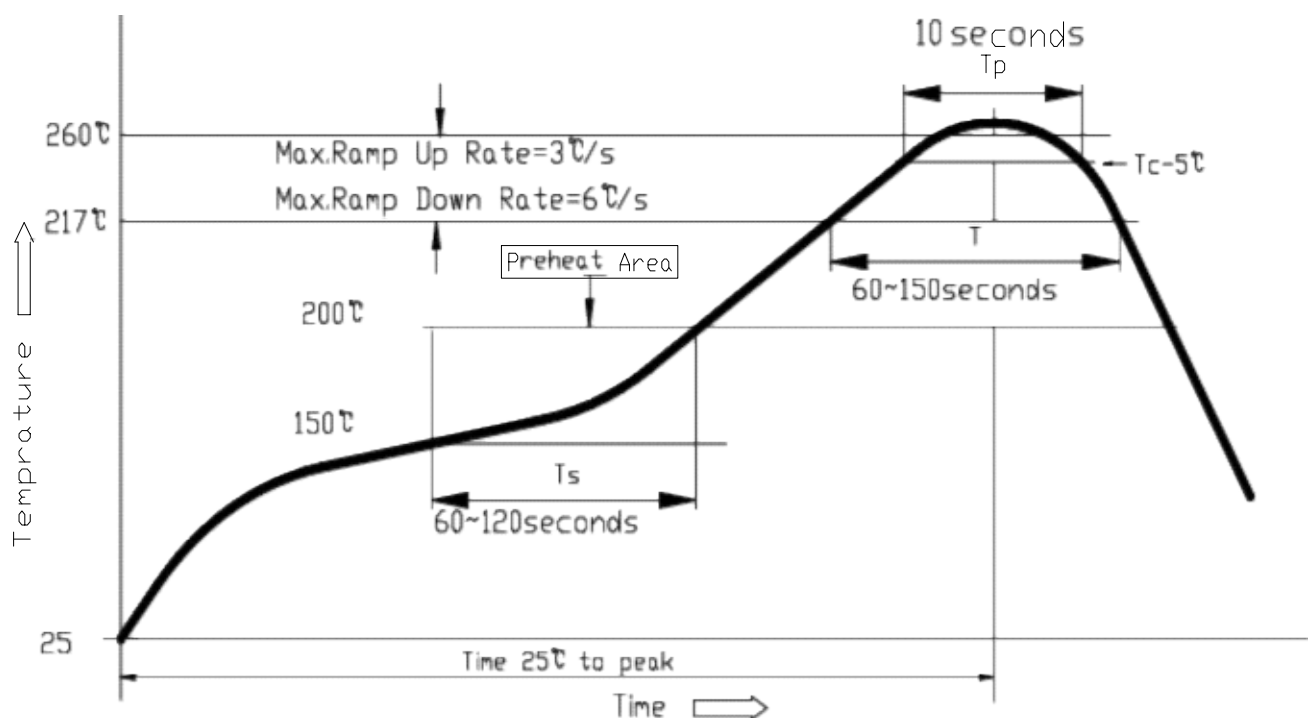
(7) The part Temperature (ambient+temp rise) should not exceed 125℃ under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.

10,可靠性测试 Reliability Test

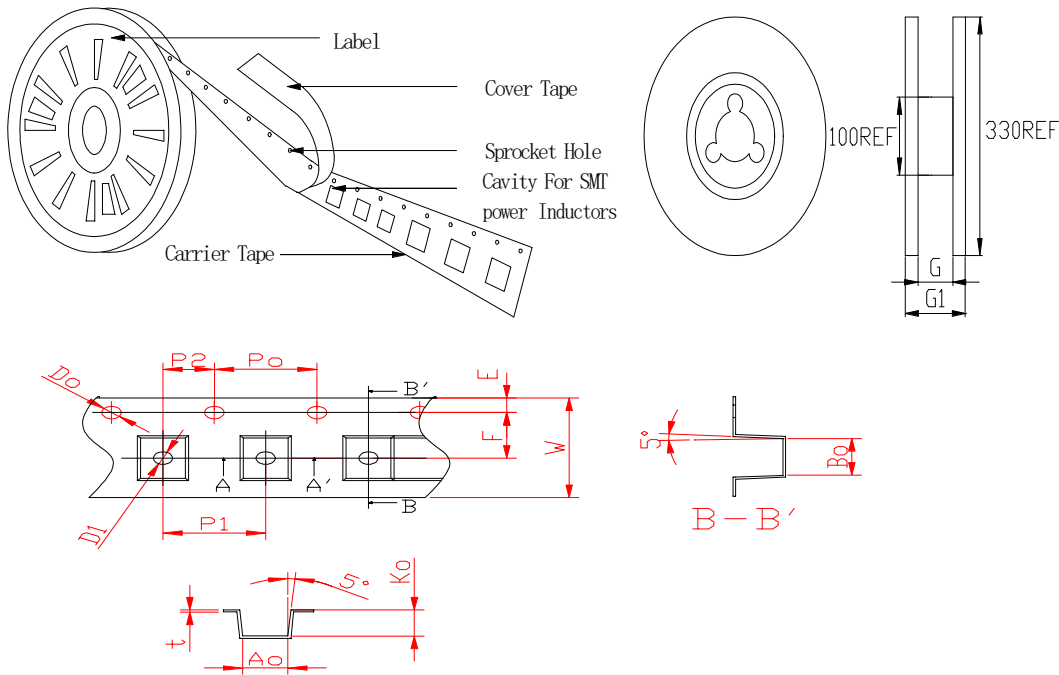
TEST ITEM	SPECIFICATION	TEST CONDITION
Withstanding voltage test	After test, inductors shall have no evidence of electrical and mechanical damage.	AC voltage of 100v and AC current of 1mA applied between inductor's terminal and core for 3 secs.
Resistance to soldering heat	1. Inductor shall have no evidence of electrical and mechanical damage. 2. Inductance shall not change more than ±5%. 3. Q shall not change more than ±20%.	a. Temp: 260±5°c b. Time: 10±1.0 secs
Solderability test	The terminal shall be at least 95% covered with solder.	After fluxing, the terminal shall be dipped in a melted solder bath at 245±5°C for 4±1.0 secs.
high humidity test	The anti-erosion quality of the surface and the specimen's inductance shall not change from the initial value within ±10%	a. Test condition
		1)Temp.:60±2°C , R.H.:90%-95%
		2)Time:500±2hours
		b. Measurement methods:
The experimental component should be put at normal condition for 2 hours then to measure again after test		
Salt spray test		a. Test condition
		1)Temp.:35±2°C
		2)Time:48±2hours
		3)Salt solution PH:6.5~7.2
		b. Measurement methods:
The experimental component should be put at normal condition for 2 hours then to measure again after test		
thrust test	The product cannot be separated from PCB board	Push from the side of the product
		Thrust size: 5N
		keep time: 1min
Tensile test		Pull from the top of the product
		pull size:5N
		keep time: 1min
Vibration test	1. Inductance shall be within ±10% of the initial value. 2. Appearance:no damage	a. Frequency: 10 to 55HZ
		b. Amplitude: 1.5mm
		c. Direction and time:
		X, Y and Z directions for 2 hours each.

Free fall test	No mechanical damage shall be noticed.	Drop 5 times on a concrete floor from 1m the height
Temperature Cycling test	1. Inductance shall be within $\pm 10\%$ of the initial value 2. Appearance: No damage	a. Test condition
		1)Temp.: -55°C ,time:30 $\pm$ 3min
		2)Temp.: +125°C ,time: 30 $\pm$ 3min
		3)Cycles times:10 cycles
		b. Measurement methods:
		The experimental component should be put at normal condition for 2 hours then to measure again after test
High Temperature resistance test		a. Test condition
		1)Applied rated current
		2)Temp.:125°C $\pm$ 2°C
		3)Test time:500+24/-0H
		b. Measurement methods:
		The experimental component should be put at normal condition for 24 hours then to measure again after test.
Low temperature resistance test		a. Test condition
		1)Temp.: -55°C $\pm$ 2°C
		2)Test time:500+24/-0H
		b. Measurement methods:
		The experimental component should be put at normal condition for 24 hours then to measure again after test.

10，推荐回流焊曲线 Recommended Soldering Technologies



11, 包装带尺寸 Packing Carrying Tape Size



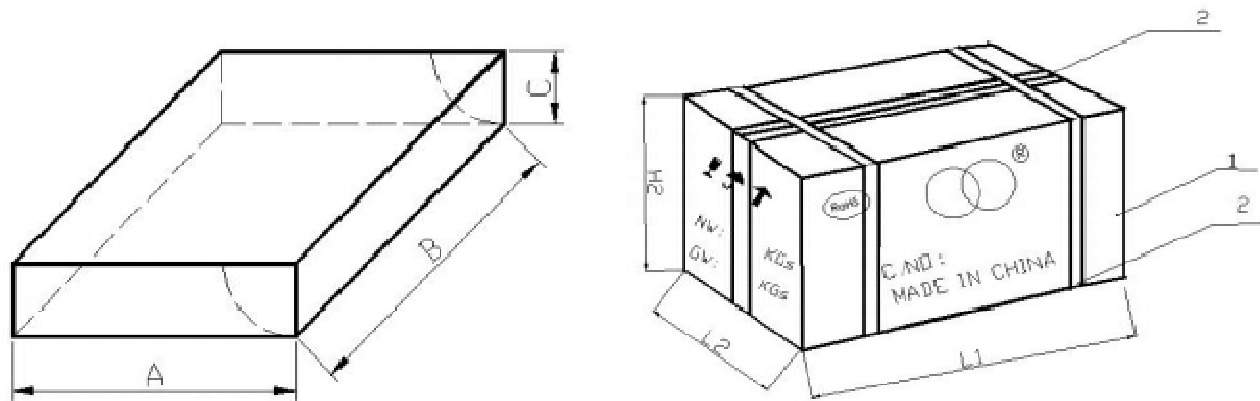
产品规格	$W \pm 0.20$	$E \pm 0.10$	$F \pm 0.05$	$D0 \pm 0.1/-0$	$D1 \pm 0.1/-0$	$P0 \pm 0.05$	$P1 \pm 0.10$
HSM0412	12.00	1.75	5.50	1.50	1.50	4.00	8.00
HSM0415	12.00	1.75	5.50	1.50	1.50	4.00	8.00
HSM0420	12.00	1.75	5.50	1.50	1.50	4.00	8.00
HSM0515	12.00	1.75	5.50	1.50	1.50	4.00	8.00
HSM0518	12.00	1.75	5.50	1.50	1.50	4.00	8.00
HSM0520	12.00	1.75	5.50	1.50	1.50	4.00	8.00
HSM0530	12.00	1.75	5.50	1.50	1.50	4.00	8.00
HSM0615	16.00	1.75	7.50	1.50	1.50	4.00	12.00
HSM0618	16.00	1.75	7.50	1.50	1.50	4.00	12.00
HSM0620	16.00	1.75	7.50	1.50	1.50	4.00	12.00
HSM0624	16.00	1.75	7.50	1.50	1.50	4.00	12.00
HSM0630	16.00	1.75	7.50	1.50	1.50	4.00	12.00
HSM0640	16.00	1.75	7.50	1.50	1.50	4.00	12.00
HSM0650	16.00	1.75	7.50	1.50	1.50	4.00	12.00
HSM0840	24.00	1.75	11.50	1.50	1.50	4.00	16.00
HSM0850	24.00	1.75	11.50	1.50	1.50	4.00	16.00
HSM1030	24.00	1.75	11.50	1.50	1.50	4.00	16.00
HSM1040	24.00	1.75	11.50	1.50	1.50	4.00	16.00
HSM1050	24.00	1.75	11.50	1.50	1.50	4.00	16.00
HSM1070	24.00	1.75	11.50	1.50	1.50	4.00	16.00
HSM1080	24.00	1.75	11.50	1.50	1.50	4.00	16.00
HSM1235	24.00	1.75	11.50	1.50	1.50	4.00	16.00
HSM1240	24.00	1.75	11.50	1.50	1.50	4.00	16.00
HSM1250	24.00	1.75	11.50	1.50	1.50	4.00	16.00
HSM1265	24.00	1.75	11.50	1.50	1.50	4.00	16.00
HSM1770	32.00	1.75	14.20	1.50	1.50	4.00	24.00

产品规格	P2±0. 10	P0*10±0. 20	t ±0. 05	A0+0. 10	B0+0. 10	K0±0. 10	G±0. 20
HSM0412	2. 00	40. 00	0. 30	4. 30	4. 40	1. 50	12. 5
HSM0415	2. 00	40. 00	0. 30	4. 30	4. 40	1. 80	12. 5
HSM0420	2. 00	40. 00	0. 30	4. 30	4. 40	2. 30	12. 5
HSM0515	2. 00	40. 00	0. 30	5. 00	5. 80	2. 00	12. 5
HSM0518	2. 00	40. 00	0. 30	5. 00	5. 80	2. 00	12. 5
HSM0520	2. 00	40. 00	0. 30	5. 00	5. 80	2. 30	12. 5
HSM0530	2. 00	40. 00	0. 30	5. 00	5. 80	3. 30	12. 5
HSM0615	2. 00	40. 00	0. 30	6. 90	7. 40	2. 00	16. 5
HSM0618	2. 00	40. 00	0. 30	6. 90	7. 40	2. 00	16. 5
HSM0620	2. 00	40. 00	0. 30	6. 90	7. 40	2. 30	16. 5
HSM0624	2. 00	40. 00	0. 30	6. 90	7. 40	2. 80	16. 5
HSM0630	2. 00	40. 00	0. 30	6. 90	7. 40	3. 30	16. 5
HSM0640	2. 00	40. 00	0. 30	6. 90	7. 40	4. 30	16. 5
HSM0650	2. 00	40. 00	0. 30	6. 90	7. 40	5. 30	16. 5
HSM0840	2. 00	40. 00	0. 35	8. 80	10. 00	4. 50	24. 5
HSM0850	2. 00	40. 00	0. 35	8. 80	10. 00	5. 50	24. 5
HSM1030	2. 00	40. 00	0. 35	10. 60	12. 00	3. 50	24. 5
HSM1040	2. 00	40. 00	0. 35	10. 60	12. 00	4. 50	24. 5
HSM1050	2. 00	40. 00	0. 35	10. 60	12. 00	5. 50	24. 5
HSM1070	2. 00	40. 00	0. 40	10. 60	12. 00	7. 50	24. 5
HSM1080	2. 00	40. 00	0. 40	10. 60	12. 00	8. 50	24. 5
HSM1235	2. 00	40. 00	0. 40	13. 00	13. 10	4. 50	24. 5
HSM1240	2. 00	40. 00	0. 40	13. 00	13. 10	4. 50	24. 5
HSM1250	2. 00	40. 00	0. 40	13. 00	13. 10	5. 50	24. 5
HSM1265	2. 00	40. 00	0. 40	13. 00	13. 10	7. 00	24. 5
HSM1770	2. 00	40. 00	0. 50	17. 25	19. 00	7. 50	32. 5

12 ， 包装数量 Packing Quantity

产品规格	最小包装数量
HSM0412/0415/0420	3000PCS
HSM0515/0518/0520/0530	2000PCS
HSM0615/0618/0620	2000PCS
HSM0624/0630/0640/0650	1000PCS
HSM1030/1040	1000PCS
HSM1050	800PCS
HSM1070/1080	400PCS
HSM1235/1240/1250/1265	500PCS
HSM1770	300PCS

13, 包装盒尺寸 Package Size



卷盘包装盒 Reel box

外包装箱 Outer box

All reel boxes and outer boxes can be customized according to customer requirements

A	B	C
338	350	85

L1	L2	H2
373	355	280