

规格确认书

SPECIFICATION

客 户

CUSTOMER:

客 户 料 号

CUSTOMER P/N:

物 料 名 称

一体成型电感

MODEL NO:

Molding Power Choke

料 号

HPS 系列

P/N:

HPS series

文 件 编 号

FILE NO:

22-07

日期: 2022-07-22

承办人: 刘俊

DATE: July 22, 2022

ISSUEDER: Liu Jun

客户确认 APPROVED BY

签名:

日期:

SIGN:

DATE:

结论 RESULT:

确认后请回传 PLEASE RETURN BY ONE COPY

●特征

磁屏蔽结构, 抗干扰强, 超低蜂鸣噪音; 低损耗, 低电阻, 小体积大电流。

适合表面贴装。

工作温度范围-55°C 至+125°C

●用途

TV、显卡、内存、笔记本电脑、平板电脑、通讯设备、工业设备。

●FEATURES

Magnetic shielded structure,excellent resistance to EMI,ultra low buzz noise,Low loss,low impedance,small volume,large current.

Suitable for surface mounting equipment.

Operating temperature range -55°Cto+125°C

●Applications

TV,graphics,memory,Notebooks,tablets,Communication equipments,industrial equipments

●品名系统

HPS	0420	-	4R7	M	T
①	②		③	④	⑤

① 产品代号: 模压式贴片功率电感。

② 尺寸规格: 0412=4.2×4.4×1.0(mm)
0420=4.2×4.4×1.8(mm)
0518=5.2×5.4×1.6(mm)
0530=5.2×5.4×2.8(mm)
0620=6.6×7.0×1.8(mm)
0624=6.6×7.0×2.2(mm)
0630=6.6×7.0×2.8(mm)
0650=6.6×7.0×4.8(mm)
0840=8.2×8.8×3.8(mm)
1003=10.0×11.5×2.8(mm)
1004=10.0×11.0×3.8(mm)
1005=10.0×11.5×4.8(mm)
1350=12.6×13.45×4.8(mm)
1360=12.6×13.45×5.8(mm)
1365=12.6×13.45×6.5(mm)
1770=17.15×17.15×6.7(mm)
2213=22.0×23.5×12.6(mm)

③电感量标称值:R15=0.15μH

1R0=1.0μH

100=10μH

④电感量公差:M=±20% N=±30%

⑤包装:T=编带

●Product Identification

HPS	0420	-	4R7	M	T
①	②		③	④	⑤

①Product symbol: Molded SMD Power Inductors.

②Dimension: 0412=4.2×4.4×1.0(mm)
0420=4.2×4.4×1.8(mm)
0518=5.2×5.4×1.6(mm)
0530=5.2×5.4×2.8(mm)
0620=6.6×7.0×1.8(mm)
0624=6.6×7.0×2.2(mm)
0630=6.6×7.0×2.8(mm)
0650=6.6×7.0×4.8(mm)
0840=8.2×8.8×3.8(mm)
1003=10.0×11.5×2.8(mm)
1004=10.0×11.0×3.8(mm)
1005=10.0×11.5×4.8(mm)
1350=12.6×13.45×4.8(mm)
1360=12.6×13.45×5.8(mm)
1365=12.6×13.45×6.5(mm)
1770=17.15×17.15×6.7(mm)
2213=22.0×23.5×12.6(mm)

③Inductance: R15=0.15μH

1R0=1.0μH

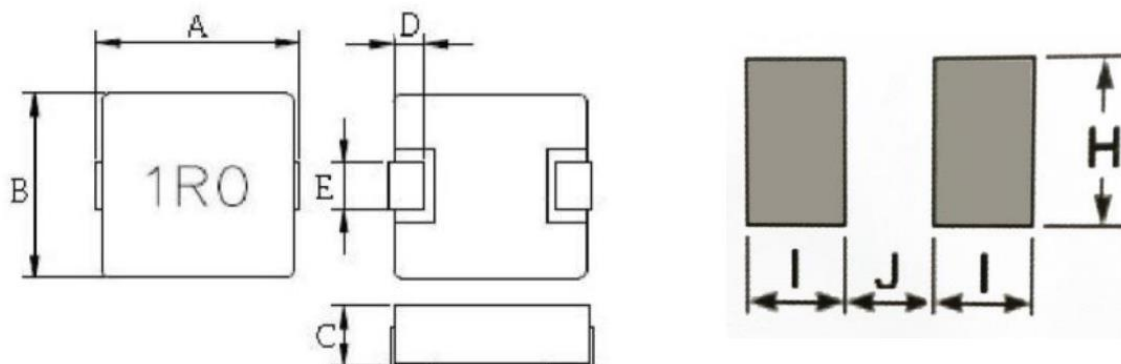
100=10μH

④Tolerance:M=±20% N=±30%

⑤Packing:T=Tape & Reel

●结构及尺寸

Structure And Dimensions



Units:mm

series	A	B	C	D	E	I Typ.	J Typ	H Typ.
0412	4.4±0.35	4.2±0.25	1.0±0.2	0.8±0.3	2.0±0.3	1.5	2.2	2.5
0420	4.4±0.35	4.2±0.25	1.8±0.2	1.1±0.3	2.0±0.3	1.5	2.2	2.5
0518	5.4±0.35	5.2±0.2	1.6±0.2	1.2±0.3	2.2±0.3	1.9	2.2	2.5
0520	5.4±0.35	5.2±0.2	1.8±0.2	1.2±0.3	2.3±0.3	1.9	2.2	2.5
0530	5.4±0.35	5.2±0.2	2.8±0.2	1.2±0.3	2.3±0.3	1.9	2.2	2.5
0618	7.0±0.30	6.6±0.2	1.6±0.2	1.6±0.3	3.0±0.3	2.35	3.4	3.5
0620	7.0±0.30	6.6±0.2	1.8±0.2	1.6±0.3	3.0±0.3	2.35	3.4	3.5
0624	7.0±0.30	6.6±0.2	2.2±0.3	1.6±0.3	3.0±0.3	2.35	3.4	3.5
0630	7.0±0.30	6.6±0.2	2.8±0.2	1.6±0.3	3.0±0.3	2.35	3.4	3.5
0650	7.0±0.30	6.6±0.2	4.8±0.2	1.6±0.3	3.0±0.3	2.35	3.4	3.5
0840	8.6±0.40	8.0±0.3	3.8±0.2	1.8±0.3	3.0±0.3	2.55	4.2	3.8
0850	8.6±0.40	8.0±0.3	4.8±0.2	1.8±0.3	3.0±0.3	2.55	4.2	3.8
1030	11.5MAX	10.0±0.3	2.8±0.3	2.2±0.5	3.0±0.5	4.1	5.4	4.1
1040	11.5MAX	10.0±0.3	3.8±0.2	2.0±0.5	3.0±0.5	4.1	5.4	4.1
1050	11.5MAX	10.0±0.3	4.8±0.2	2.0±0.5	3.0±0.5	4.1	5.4	4.1
1340	3.50±0.50	12.8±0.5	4.0MAX	2.0±0.5	2.2±0.5	3.25	8	5.5
1350	3.45±0.35	12.6±0.3	4.8±0.2	2.0±0.5	4.3±0.5	3.25	8	5.5
1360	3.45±0.35	12.6±0.3	5.8±0.2	2.0±0.5	3.8±0.5	3.25	8	5.5
1365	3.45±0.35	12.6±0.3	6.5MAX	2.0±0.5	3.8±0.5	3.25	8	5.5
1770	17.5±0.5	17.0±0.5	7.0MAX	2.5±0.5	12.0±0.5	3.5	11.2	12.3
2213	22.5±0.5	22.0±0.5	12.5±0.5	5.0±0.5	18.5±0.3	5.55	12.2	19.6

●规格

Specifications

HPS0412系列 (TYPE)

Part Number	Inductance	DC Resistance	Saturation Current'3		Heat Rating Current'4	
	100kHz,1V	Max.	Max.	Typ.	Max.	Typ.
Units	μH	mΩ	A		A	
Symbol	L	DCR	Isat		Irms	
HPS0412-R47MT	0.47±20%	22	8.0	8.5	6.0	6.2
HPS0412-R68MT	0.68±20%	34	4.7	4.9	5.8	6.0
HPS0412-1R0MT	1.0±20%	50	5.3	5.5	4.5	4.7
HPS0412-1R5MT	1.5±20%	72	3.8	4.0	3.3	3.5
HPS0412-2R2MT	2.2±20%	75	3.6	4.0	2.8	3.0
HPS0412-3R3MT	3.3±20%	145	2.8	3.0	2.0	2.2
HPS0412-4R7MT	4.7±20%	180	2.7	2.9	1.8	2.0

HPS0420系列 (TYPE)

Part Number	Inductance	DC Resistance	Saturation Current'3		Heat Rating Current'4	
	100kHz,1V	Max.	Max.	Typ.	Max.	Typ.
Units	μH	mΩ	A		A	
Symbol	L	DCR	Isat		Irms	
HPS0420-R10MT	0.1±20%	4	17.6	22	11.2	13
HPS0420-R22MT	0.22±20%	6.6	10	12.5	8.2	9.5
HPS0420-R33MT	0.33±20%	11	9.6	12	8.6	10
HPS0420-R47MT	0.47±20%	14	7.6	9.5	6.65	7.5
HPS0420-R56MT	0.56±20%	16	7.2	9	6.1	7
HPS0420-R68MT	0.68±20%	18	6.4	8	6.15	7
HPS0420-1R0MT	1.0±20%	27	5.6	7	5.4	6
HPS0420-1R2MT	1.2±20%	27	5.2	6.5	5.4	6
HPS0420-1R5MT	1.5±20%	46	4.4	5.5	4.3	5
HPS0420-2R2MT	2.2±20%	58	4.0	5	3.8	4.5
HPS0420-3R3MT	3.3±20%	87	2.8	3.5	2.8	3.3
HPS0420-4R7MT	4.7±20%	105	2.4	3	2.2	2.8
HPS0420-6R8MT	6.8±20%	175	2.0	2.5	1.9	2.4
HPS0420-100MT	10±20%	282	1.6	2	1.3	1.6

●规格

Specifications

HPS0518系列 (TYPE)

Part Number	Inductance	DC Resistance	Saturation Current'3		Heat Rating Current'4	
	100kHz,1V	Max.	Max.	Typ.	Max.	Typ.
Units	μH	mΩ	A		A	
Symbol	L	DCR	Isat		Irms	
HPS0518-R47MT	0.47±20%	9	9.6	15.5	9.5	10.5
HPS0518-R56MT	0.56±20%	10	8.8	15	8.2	9.5
HPS0518-R68MT	0.68±20%	13.8	9.3	11.2	7.7	8.9
HPS0518-1R0MT	1.0±20%	17	7.2	9	7.2	8
HPS0518-1R5MT	1.5±20%	26	6.4	9	6.6	7.5
HPS0518-2R2MT	2.2±20%	35	4.8	6.5	4.2	5
HPS0518-3R3MT	3.3±20%	58	3.84	5	3.8	4.5
HPS0518-4R7MT	4.7±20%	85	3.2	4	3.0	3.5
HPS0518-6R8MT	6.8±20%	120	2.72	3.4	2.4	2.8
HPS0518-100MT	10±20%	155	2	3	2.2	2.5

HPS0520系列 (TYPE)

Part Number	Inductance	DC Resistance	Saturation Current'3		Heat Rating Current'4	
	100kHz,1V	Max.	Max.	Typ.	Max.	Typ.
Units	μH	mΩ	A		A	
Symbol	L	DCR	Isat		Irms	
HPS0520-R22MT	0.22±20%	8	12.5	15	9	19
HPS0520-R68MT	0.68±20%	18	11	11.2	7	8.9
HPS0520-1R0MT	1.0±20%	18.5	7.5	9.5	7	8
HPS0520-1R5MT	1.5±20%	30	8	8.5	5.5	7.5
HPS0520-2R2MT	2.2±20%	34	5.5	7	4.5	5
HPS0520-3R3MT	3.3±20%	58	4.7	5.5	4.1	4.5
HPS0520-4R7MT	4.7±20%	78	3.2	4.5	3.0	3.5
HPS0520-6R8MT	6.8±20%	120	2.8	3.5	2.1	2.8
HPS0520-8R2MT	8.2±20%	150	2.3	3	2.1	2.6
HPS0520-100MT	10±20%	175	2.2	3	2	2.5

●规格

Specifications

HPS0530系列 (TYPE)

Part Number	Inductance	DC Resistance	Saturation Current'3		Heat Rating Current'4	
	100kHz,1V	Max.	Max.	Typ.	Max.	Typ.
Units	μH	mΩ	A		A	
Symbol	L	DCR	Isat		Irms	
HPS0530-R10MT	0.10±20%	3	24	33	23	25
HPS0530-R20MT	0.20±20%	3.9	11.6	14.5	13	14
HPS0530-R33MT	0.33±20%	5.5	14.4	18	13.1	14
HPS0530-R47MT	0.47±20%	8.5	9.6	12	10	11
HPS0530-R68MT	0.68±20%	12	9.2	11.5	8.2	9.0
HPS0530-1R0MT	1.0±20%	14	8	11	7.8	8.5
HPS0530-1R2MT	1.2±20%	16	7.6	11	7.85	8.5
HPS0530-1R5MT	1.5±20%	25	7.2	8.5	7.6	8.2
HPS0530-2R2MT	2.2±20%	29	5.6	7.5	6.4	7.0
HPS0530-3R3MT	3.3±20%	38	4.8	6.0	5	5.5
HPS0530-4R7MT	4.7±20%	60	3.68	5	4	4.5
HPS0530-6R8MT	6.8±20%	90	2.88	4	2.9	3.5
HPS0530-100MT	10±20%	125	2.8	3.5	2.8	3.2
HPS0530-150MT	15±20%	180	2.0	2.2	1.6	1.7
HPS0530-220MT	22±20%	248	2.0	2.3	1.5	1.7
HPS0530-330MT	33±20%	496	1.4	1.6	1.0	1.2

HPS0618系列 (TYPE)

Part Number	Inductance	DC Resistance	Saturation Current'3		Heat Rating Current'4	
	100kHz,1V	Max.	Max.	Typ.	Max.	Typ.
Units	μH	mΩ	A		A	
Symbol	L	DCR	Isat		Irms	
HPS0618-R10NT	0.1±30%	2.8	24.0	26.0	22.0	24.0
HPS0618-R15MT	0.15±20%	3	28.0	30.0	20.0	22.0
HPS0618-R22MT	0.22±20%	4.5	23.0	25.0	14.0	15.0
HPS0618-R33MT	0.33±20%	5	22.0	24.0	13.0	14.0
HPS0618-R47MT	0.47±20%	8.5	18.0	20.0	10.5	11.5
HPS0618-R68MT	0.68±20%	12	15.0	16.0	9.0	10.0
HPS0618-1R0MT	1.0±20%	18	11.0	12.0	7.5	8.0
HPS0618-1R5MT	1.5±20%	30	9.0	10.0	6.5	7.0
HPS0618-2R2MT	2.2±20%	42	7.5	8.0	4.5	5.0
HPS0618-3R3MT	3.3±20%	58	6.5	7.0	4.5	5.0
HPS0618-4R7MT	4.7±20%	75	5.0	5.5	3.8	4.0
HPS0618-6R8MT	6.8±20%	105	4.2	4.5	3.0	3.2
HPS0618-100MT	10±20%	165	3.4	3.7	2.1	2.3

●规格

Specifications

HPS0620系列 (TYPE)

Part Number	Inductance	DC Resistance	Saturation Current ³		Heat Rating Current ⁴	
	100kHz,1V	Max.	Max.	Typ.	Max.	Typ.
Units	μH	mΩ	A		A	
Symbol	L	DCR	Isat		Irms	
HPS0620-R10MT	0.1±20%	2.3	24.0	38.0	22.0	25.0
HPS0620-R22MT	0.22±20%	3.5	22.0	24.0	14.0	22.0
HPS0620-R47MT	0.47±20%	8.4	17.0	18.0	10.0	11.5
HPS0620-R68MT	0.68±20%	12	15.0	16.5	8.8	9.5
HPS0620-1R0MT	1.0±20%	16	11.0	12.0	7.5	8.5
HPS0620-1R5MT	1.5±20%	26	8.5	9.2	6.5	8.0
HPS0620-2R2MT	2.2±20%	35	7.0	8.0	5.0	7.0
HPS0620-3R3MT	3.3±20%	50	5.5	6.0	4.0	4.5
HPS0620-4R7MT	4.7±20%	62	4.5	5.0	3.5	4.0
HPS0620-6R8MT	6.8±20%	110	4.0	4.5	2.8	3.0
HPS0620-100MT	10±20%	155	3.4	4.0	2.1	2.3
HPS0620-220MT	22±20%	350	2.0	2.3	1.5	1.8

HPS0624系列 (TYPE)

Part Number	Inductance	DC Resistance	Saturation Current ³		Heat Rating Current ⁴	
	100kHz,1V	Max.	Max.	Typ.	Max.	Typ.
Units	μH	mΩ	A		A	
Symbol	L	DCR	Isat		Irms	
HPS0624-R10MT	0.10±20%	1.85	36	60	21	23
HPS0624-R15MT	0.15±20%	2.85	34	35	18	22
HPS0624-R22MT	0.22±20%	3.2	33	34	16	21
HPS0624-R33MT	0.33±20%	4.1	19.6	24.5	15	18
HPS0624-R47MT	0.47±20%	5.1	21	22	13	15
HPS0624-R56MT	0.56±20%	6.5	13.6	17	11.5	13
HPS0624-R82MT	0.82±20%	9.5	12.8	16	10	12
HPS0624-1R0MT	1.0±20%	13.5	12	16	8	9
HPS0624-1R5MT	1.5±20%	20	10.8	15	7	9
HPS0624-2R2MT	2.2±20%	28	8	10	6.2	7
HPS0624-3R3MT	3.3±20%	39	6.4	8	4.8	5.5
HPS0624-4R7MT	4.7±20%	50	5.2	7.5	4.3	5
HPS0624-6R8MT	6.8±20%	70	4.8	6	3.2	4
HPS0624-100MT	10±20%	101	3.2	4	2.4	3.1
HPS0624-150MT	15±20%	160	2.64	3.3	2.0	2.5

●规格

Specifications

HPS0630系列 (TYPE)

Part Number	Inductance	DC Resistance	Saturation Current ³		Heat Rating Current ⁴	
	100kHz,1V		Max.	Typ.	Max.	Typ.
Units	μH	mΩ	A		A	
Symbol	L	DCR	Isat		Irms	
HPS0630-R22MT	0.22±20%	3	32	34	21	24
HPS0630-R33MT	0.33±20%	3.5	22	25	20	21
HPS0630-R47MT	0.47±20%	4.1	18	20	16	18
HPS0630-R56MT	0.56±20%	4.5	16	18	15	16.5
HPS0630-R68MT	0.68±20%	5.3	15	17	14.5	16
HPS0630-R82MT	0.82±20%	6.0	14	16	13	14
HPS0630-1R0MT	1.0±20%	7.4	13.5	15	11.2	12
HPS0630-1R5MT	1.5±20%	12.1	12	14	9.5	12
HPS0630-2R2MT	2.2±20%	15	10.5	12	8.5	9.5
HPS0630-3R3MT	3.3±20%	22	8.7	9.5	8	8.5
HPS0630-4R7MT	4.7±20%	33	7.5	9	5.5	6
HPS0630-5R6MT	5.6±20%	42	5.5	6.5	5	5.5
HPS0630-6R8MT	6.8±20%	48	5.2	6	4.5	5
HPS0630-8R2MT	8.2±20%	60	5	5.5	4	5
HPS0630-100MT	10±20%	68	4.9	5.5	3.8	4.5
HPS0630-150MT	15±20%	115	3.5	4.0	2.6	3
HPS0630-220MT	22±20%	170	2.5	3	2.2	2.5
HPS0630-330MT	33±20%	270	2.1	2.5	1.8	2
HPS0630-470MT	47±20%	385	1.8	2	1.3	1.5

Notes

All test data is referenced to 25°C ambient.

Rated current:Isat or Irms,which ever is smaller.

Irms (A):DC current(A)that will cause an approximate ΔT of 40°C.(reference ambient temperature is 25°C)

Isat(A):DC current(A)that will cause L0 to drop approximately 30%.

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

●规格

Specifications

HPS0650系列 (TYPE)

Part Number	Inductance	DC Resistance	Saturation Current ³		Heat Rating Current ⁴	
	100kHz,1V	Max.	Max.	Typ.	Max.	Typ.
Units	μH	mΩ	A		A	
Symbol	L	DCR	Isat		Irms	
HPS0650-R47MT	0.47±20%	3.9	16.8	21	17.0	20
HPS0650-R68MT	0.68±20%	4.5	14.4	18	14.5	16.5
HPS0650-1R0MT	1.0±20%	6.6	12.8	16	10	12
HPS0650-1R5MT	1.5±20%	10	10.4	13	8.2	9.5
HPS0650-2R2MT	2.2±20%	12.5	8.8	11	8.0	9
HPS0650-3R3MT	3.3±20%	22	8.0	10	7.6	8.5
HPS0650-4R7MT	4.7±20%	29	6.4	8	5	6
HPS0650-6R8MT	6.8±20%	41	5.04	6.3	4	5.8
HPS0650-8R2MT	8.2±20%	48	4.4	5.5	4.8	5.5
HPS0650-100MT	10±20%	60	4.24	5.3	3.8	4.5
HPS0650-150MT	15±20%	90	3.2	4	2.6	3.1
HPS0650-220MT	22±20%	140	2.8	3.5	2	2.6
HPS0650-330MT	33±20%	190	2.4	3.0	1.8	2.3
HPS0650-470MT	47±20%	230	2.08	2.6	1.5	2

HPS0840系列 (TYPE)

Part Number	Inductance	DC Resistance	Saturation Current ³		Heat Rating Current ⁴	
	100kHz,1V	Max.	Max.	Typ.	Max.	Typ.
Units	μH	mΩ	A		A	
Symbol	L	DCR	Isat		Irms	
HPS0840-1R0MT	1.0±20%	5	19	20	16	17
HPS0840-2R2MT	2.2±20%	12	15	16	10.5	11.5
HPS0840-3R3MT	3.3±20%	15	11	12	9	10
HPS0840-4R7MT	4.7±20%	22	10	10.5	7.5	8
HPS0840-6R8MT	6.8±20%	35	9	10	6	7
HPS0840-8R2MT	8.2±20%	52	7.5	8	5	6.5
HPS0840-100MT	10.0±20%	52	7.5	8	5	6.5
HPS0840-150MT	15.0±20%	70	6	7	4.5	5
HPS0840-220MT	22.0±20%	105	5	5.5	3.5	4.2
HPS0840-330MT	33.0±20%	156	3.3	3.5	3.0	3.5
HPS0840-470MT	47.0±20%	175	2.5	3	2	2.5

●规格

Specifications

HPS0850系列 (TYPE)

Part Number	Inductance	DC Resistance	Saturation Current'3		Heat Rating Current'4	
	100kHz,1V		Max.	Typ.	Max.	Typ.
Units	μH	mΩ	A		A	
Symbol	L	DCR	Isat		Irms	
HPS0850-1R0MT	1.0±20%	5.5	18.2	20	15	17
HPS0850-2R2MT	2.2±20%	9	15	16	12	11.5
HPS0850-3R3MT	3.3±20%	13.5	11	13	10	11
HPS0850-4R7MT	4.7±20%	21	10.5	11	9	10
HPS0850-6R8MT	6.8±20%	33	8.8	10	7.5	8
HPS0850-100MT	10.0±20%	40	8	9	6.5	7.5
HPS0850-150MT	15.0±20%	65	6.5	7.5	4.3	5.5
HPS0850-220MT	22.0±20%	80	6	6.5	3.8	4.5
HPS0850-330MT	33.0±20%	145	4.5	4.8	2.6	3.5
HPS0850-470MT	47.0±20%	180	2.6	3.2	2.3	2.7
HPS0850-680MT	68.0±20%	255	2.5	3	2	2.5

HPS1030系列 (TYPE)

Part Number	Inductance	DC Resistance	Saturation Current'3		Heat Rating Current'4	
	100kHz,1V		Max.	Typ.	Max.	Typ.
Units	μH	mΩ	A		A	
Symbol	L	DCR	Isat		Irms	
HPS1030-1R0MT	1.0±20%	7	18.5	20	13	14
HPS1030-2R2MT	2.2±20%	15	12	14	9	10
HPS1030-3R3MT	3.3±20%	20	10	12	7	8
HPS1030-4R7MT	4.7±20%	25	9	10	5.5	7
HPS1030-6R8MT	6.8±20%	40	7.5	8	4.5	5
HPS1030-100MT	10±20%	63	5	5.5	3.5	4

●规格

Specifications

HPS1040系列 (TYPE)

Part Number	Inductance	DC Resistance	Saturation Current'3		Heat Rating Current'4	
	100kHz,1V	Max.	Max.	Typ.	Max.	Typ.
Units	μH	mΩ	A		A	
Symbol	L	DCR	Isat		Irms	
HPS1040-R15MT	0.15±20%	0.65	60	75	40	45
HPS1040-R22MT	0.22±20%	1	48	60	30	35
HPS1040-R30MT	0.30±20%	1.1	36	45	30	35
HPS1040-R36MT	0.36±20%	1.2	36	45	25	30
HPS1040-R47MT	0.47±20%	1.7	32	40	25	30
HPS1040-R56MT	0.56±20%	1.8	26.4	33	20	25
HPS1040-R68MT	0.68±20%	2.4	24	30	19	23
HPS1040-R80MT	0.80±20%	2.7	23.2	29	19	23
HPS1040-1R0MT	1.0±20%	3.3	22.4	28	16	19
HPS1040-1R5MT	1.5±20%	4.2	19.2	24	14	16
HPS1040-2R2MT	2.2±20%	7	13.2	16.5	10	12
HPS1040-3R3MT	3.3±20%	11.8	12.8	16	9.5	11
HPS1040-4R7MT	4.7±20%	20	10.4	13	7.5	9
HPS1040-6R8MT	6.8±20%	25	9.6	12	7	8.5
HPS1040-8R2MT	8.2±20%	27	7.2	9	6.8	8
HPS1040-100MT	10±20%	30	6.8	8.5	6.9	7.8
HPS1040-150MT	15±20%	45	5.6	7	5.6	6.5
HPS1040-220MT	22±20%	66	4.4	5.5	4.2	5
HPS1040-330MT	33±20%	92	3.84	5	3.8	4.4
HPS1040-470MT	47±20%	155	3.1	3.5	2.8	3.3
HPS1040-680MT	68±20%	195	2.4	3	2	2.5
HPS1040-820MT	82±20%	285	2.3	2.8	2.1	2.3
HPS1040-101MT	100±20%	340	2.1	2.3	1.8	2

●规格

Specifications

HPS1050系列 (TYPE)

Part Number	Inductance	DC Resistance	Saturation Current ³		Heat Rating Current ⁴	
	100kHz,1V	Max.	Max.	Typ.	Max.	Typ.
Units	μ H	mΩ	A		A	
Symbol	L	DCR	Isat		Irms	
HPS1050-R22MT	0.22±20%	0.8	57.5	60	32.5	37
HPS1050-1R0MT	1.0±20%	3	28	30	20.3	23
HPS1050-1R5MT	1.5±20%	3.8	22	25	18.5	21
HPS1050-2R2MT	2.2±20%	6	16.8	19	13.2	15
HPS1050-3R3MT	3.3±20%	11	14	16	11.5	13
HPS1050-4R7MT	4.7±20%	15	13.2	15	9.7	11
HPS1050-6R8MT	6.8±20%	18.5	12.3	14	8.0	9
HPS1050-100MT	10±20%	28	8.8	10	7.0	8
HPS1050-150MT	15±20%	42	6.5	7.5	5.7	6.5
HPS1050-220MT	22±20%	50	5.3	6	5.0	5.5
HPS1050-330MT	33±20%	86	4.6	5.2	4.2	4.8
HPS1050-470MT	47±20%	127	4.0	4.5	3.2	3.7
HPS1050-680MT	68±20%	180	2.8	3.5	2.4	2.7
HPS1050-101MT	100±20%	290	2.5	2.8	1.8	2.1

HPS1340系列 (TYPE)

Part Number	Inductance	DC Resistance	Saturation Current ³		Heat Rating Current ⁴	
	100kHz,1V	Max.	Max.	Typ.	Max.	Typ.
Units	μ H	mΩ	A		A	
Symbol	L	DCR	Isat		Irms	
HPS1340-R47MT	0.47±20%	1.9	42	45	29	33
HPS1340-R68MT	0.68±20%	3	38	40	24	26
HPS1340-1R0MT	1.0±20%	4.5	36	38	22	24
HPS1340-1R5MT	1.5±20%	6.5	28	30	18	20
HPS1340-2R2MT	2.2±20%	7.5	18	20	14	15
HPS1340-3R3MT	3.3±20%	16	16	18	11	13
HPS1340-4R7MT	4.7±20%	20	15	16	8	9
HPS1340-6R8MT	6.8±20%	26	10	11	7	8
HPS1340-100MT	10±20%	45	7	8	5.8	6.5
HPS1340-220MT	22±20%	74	6	7	3.8	4.5
HPS1340-330MT	33±20%	95	5	6	3.5	4

●规格

Specifications

HPS1350系列 (TYPE)

Part Number	Inductance	DC Resistance	Saturation Current ³		Heat Rating Current ⁴	
	100kHz,1V	Max.	Max.	Typ.	Max.	Typ.
Units	μ H	mΩ	A		A	
Symbol	L	DCR	Isat		Irms	
HPS1350-R22MT	0.22±20%	0.7	60	75	45	50
HPS1350-R36MT	0.36±20%	0.85	40	50	37	42
HPS1350-R50MT	0.50±20%	1.15	38.4	48	33	38
HPS1350-R68MT	0.68±20%	1.55	36.8	46	29	33
HPS1350-R82MT	0.82±20%	1.67	31.2	39	26	30
HPS1350-1R0MT	1.0±20%	2.2	28	35	22	26
HPS1350-1R5MT	1.5±20%	3.2	26.4	33	19	23
HPS1350-2R2MT	2.2±20%	5	19.2	24	13	15
HPS1350-3R3MT	3.3±20%	7	17.6	22	12	14
HPS1350-4R7MT	4.7±20%	9	16	21	11	13
HPS1350-6R8MT	6.8±20%	18	12.8	16	10	12
HPS1350-8R2MT	8.2±20%	20	11	13	8.2	9.5
HPS1350-100MT	10±20%	22	9.6	12	8	9
HPS1350-150MT	15±20%	30	8	10	7	8
HPS1350-220MT	22±20%	58	5.2	6.5	3.8	4.5
HPS1350-330MT	33±20%	84	4.8	6	2.8	3.5
HPS1350-470MT	47±20%	130	4.0	5	2.6	3

Notes

All test data is referenced to 25°C ambient.

Rated current:Isat or Irms,which ever is smaller.

Irms (A):DC current(A)that will cause an approximate ΔT of 40°C.(reference ambient temperature is 25°C)

Isat(A):DC current(A)that will cause L0 to drop approximately 30%.

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

●规格

Specifications

HPS1360系列 (TYPE)

Part Number	Inductance	DC Resistance	Saturation Current ³		Heat Rating Current ⁴	
	100kHz,1V	Max.	Max.	Typ.	Max.	Typ.
Units	μ H	mΩ	A		A	
Symbol	L	DCR	Isat		Irms	
HPS1360-R22MT	0.22±20%	0.75	60	75	40	45
HPS1360-R33MT	0.33±20%	0.8	50	60	38	42
HPS1360-R82MT	0.82±20%	2.1	40	45	26	28
HPS1360-1R0MT	1.0±20%	2.85	34	38	24	26
HPS1360-1R5MT	1.5±20%	2.8	28	30	24	26
HPS1360-2R2MT	2.2±20%	4.5	25	27	20	22
HPS1360-3R3MT	3.3±20%	7.5	24	26	16	18
HPS1360-4R7MT	4.7±20%	11	19	20	14	16
HPS1360-5R6MT	5.6±20%	12	17	18	11	13
HPS1360-6R8MT	6.8±20%	15	16	17	10	12
HPS1360-8R2MT	8.2±20%	20	15	16	9	10
HPS1360-100MT	10±20%	22	13	14	9	10
HPS1360-150MT	15±20%	35	12	13	7	8
HPS1360-180MT	18±20%	36	12	13	6.5	7.8
HPS1360-220MT	22±20%	40	9	10	6	7.5
HPS1360-270MT	27±20%	60	8	9	5.2	5.8
HPS1360-330MT	33±20%	68	8	9	5	5.5
HPS1360-470MT	47±20%	70	5	6	4.5	5
HPS1360-680MT	68±20%	115	4	5	3.5	4
HPS1360-820MT	82±20%	165	4	5	3	3.5
HPS1360-101MT	100±20%	175	4	4.5	2.7	3.2

Notes

All test data is referenced to 25°C ambient.

Rated current:Isat or Irms,which ever is smaller.

Irms (A):DC current(A)that will cause an approximate ΔT of 40°C.(reference ambient temperature is 25°C)

Isat(A):DC current(A)that will cause L0 to drop approximately 30%.

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

●规格

Specifications

HPS1365系列 (TYPE)

Part Number	Inductance	DC Resistance	Saturation Current ³		Heat Rating Current ⁴	
	100kHz, 1V, ±20 %	Max.	Max.	Typ.	Max.	Typ.
Units	μ H	Ω	A		A	
Symbol	L	DCR	Isat		Irms	
HPS1365-2R2MT	2.2	4.5	22	28	16	21
HPS1365-4R7MT	4.7	9	20	24	12	15
HPS1365-5R6MT	5.6	11	18	22.5	11.5	13
HPS1365-6R8MT	6.8	13.5	17	19	10.5	12
HPS1365-8R2MT	8.2	16	14	13.5	9	11
HPS1365-100MT	10	20.5	13.5	12.5	9	10
HPS1365-150MT	15	29	8	9	6.5	8.5
HPS1365-220MT	22	39.5	7	7.5	6	7
HPS1365-270MT	27	56	6	6.5	5.5	6
HPS1365-330MT	33	75	5.5	6	4.5	5.5
HPS1365-470MT	47	90	5	5.5	4.2	5
HPS1365-680MT	68	140	4.8	4.5	3.8	4
HPS1365-101MT	100	200	3	3.5	2.8	3

Notes

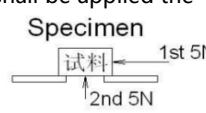
All test data is referenced to 25°C ambient.

Rated current: Isat or Irms, which ever is smaller.

Irms (A): DC current (A) that will cause an approximate ΔT of 40°C. (reference ambient temperature is 25°C)

Isat (A): DC current (A) that will cause L0 to drop approximately 30%.

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

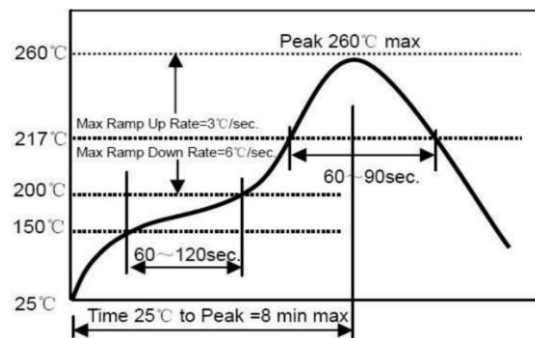
Item 项目	Specification and Requirement 项目规范和要求	Test Method 试验方法
Solder ability 焊锡附着性	New solder shall cover 95% minimum of the surface immersed. 95%以上的面积要被覆盖。	Terminals shall be immersed for 5 to 10 seconds in flux at room temperature. Dip sample into solder bath containing molten solder at $260 \pm 5^\circ\text{C}$ for 3 ± 0.5 seconds. 试验品电极涂布松香后, 在5~10秒内焊锡, 焊锡槽温度 $260 \pm 5^\circ\text{C}$, 时间: 10 ± 2 秒。
Reflow test 回流焊耐热试验	Inductance within $\pm 20\%$ of initial value. 电感值变化不超过 $\pm 20\%$ 。	Peak temp/duration of stay. 峰值温度/停留时间: $260 \pm 5^\circ\text{C}/30 \pm 10\text{s}$. The specimen shall be subjected to the reflow process under the above condition 2 times. Test board shall be 0.8mm thick. Base material shall be glass epoxy resin. 试验板的厚度0.8mm以上, 按上面条件通过两次热风炉。 Measurement: when it shall be stabilized under standard atmospheric conditions for 1h~2h before measurement. 测定: 常温常湿中放置于1小时以上2小时以内测试。
Vibration 耐振性	Appearance no damage. 无外观破损. Inductance within $\pm 20\%$ of initial value. 电感值变化不超过 $\pm 20\%$ 。	Vibration Frequency: $10 \sim 55 \sim 10\text{Hz}$ Amplitude: 1.5mm Sweep time: 1min Test Directions: X, Y, Z Test Time: 2 hours each direction. 振动频率 $10 \sim 55 \sim 10\text{Hz}$, 振幅1.5mm, 扫描时间1分钟, 分X, Y, Z方向各振动2小时。
Cold and hot cycle test 冷热冲击试验	Inductance within $\pm 20\%$ of initial value. 电感值变化不超过 $\pm 20\%$ 。	Placed at the temperature of $-40 \pm 3^\circ\text{C}$ for 30 minutes, placed at $125^\circ\text{C} \pm 3^\circ\text{C}$ for 30 minutes, the heat and cold conversion time of no more than 5 ± 2 minute for a cycle, after 20 cycles, Then it shall be stabilized under standard atmospheric conditions for 1h~2h before measurement. 在温度 $-40 \pm 3^\circ\text{C}$ 中放置30分钟, 在 $125^\circ\text{C} \pm 3^\circ\text{C}$ 放置30分钟, 中间转换时间不超过 5 ± 2 分钟为一个循环, 试验20个循环后, 常温常湿中放置1小时以上2小时以内测试。
Adhesion strength 固着强度	Appearance no damage. 无外观破损. Inductance within $\pm 20\%$ of initial value. 电感值变化不超过 $\pm 20\%$ 。	A static load using a R0.5 pressing tool shall be applied the arrow and to the body of the specimen in the direction of the arrow and shall be hold for $60 \pm 5\text{s}$. Measure after removing pressure. 按箭头方向用R0.5的加压棒在试件中施加一定的静力并保持60±5秒。 
Free fall test 自然落下试验	Appearance no damage. 无外观破损. Inductance within $\pm 20\%$ of initial value. 电感值变化不超过 $\pm 20\%$ 。	The specimen must be fixed on test board. It must be equipped with instruments of which weight is 500g. Then it shall be fallen freely from 1m height to rigid wood 3 times in each of three axes. 试件安装在基板上, 并固定在重500克的盒中, 由1米高自由落体, 3个互相垂直的方向各3次。
Dump heat test 恒温恒湿试验	Inductance within $\pm 20\%$ of initial value. 电感值变化不超过 $\pm 20\%$ 。	The specimen shall be stored at a temperature of $40 \pm 5^\circ\text{C}$ with relative humidity of 90~95% for $96 \pm 4\text{h}$. Then it shall be stabilized under standard atmospheric conditions for 1h~2h before measurement. 在温度 $40 \pm 5^\circ\text{C}$, 湿度90~95%中放置 96 ± 4 小时后, 常温常湿中放置1小时以上2小时以内测试。
Low temperature preservation test 低温保存试验	Inductance within $\pm 20\%$ of initial value. 电感值变化不超过 $\pm 20\%$ 。	The specimen shall be stored at a temperature of $-40 \pm 3^\circ\text{C}$ for $96 \pm 4\text{h}$. Then it shall be stabilized under standard atmospheric conditions for 1h~2 h before measurement. 在温度 $-40 \pm 3^\circ\text{C}$ 中放置 96 ± 4 小时后, 标准大气条件下放置1小时以上2小时以内测试。
High temperature preservation test 高温保存试验	Inductance within $\pm 20\%$ of initial value. 电感值变化不超过 $\pm 20\%$ 。	The specimen shall be stored at a temperature of $125 \pm 3^\circ\text{C}$ for $96 \pm 4\text{h}$. Then it shall be stabilized under standard atmospheric conditions for 1h~2h before measurement. 在温度 $125 \pm 3^\circ\text{C}$ 中放置 96 ± 4 小时后, 常温常湿中放置1小时以上2小时以内测试。
Operating temperature range 使用温度范围	$-55 \sim +125^\circ\text{C}$	Products heating temperature. 包括制品的发热温度。

Item 项目	Specification and Requirement 项目规范和要求	Test Method 试验方法
Storage temperature and humidity range 保存温湿度范围	temperature range温度范围:5°C~35°C humidity range湿度范围:25%~80%	In packing state.在包装的状态下。
Atmospheric conditions标准大气条件: Unless otherwise specified,the standard range of atmospheric conditions in making measurementsand test as follows. 除另有规定外, 大气条件进行测量和试验的标准范围如下: Ambient temperature 5°C to 35°C 环境温度: 5°C~35°C elative humidity:45%to 85% 相对湿度: 45%~85% ir pressure:86kPa to 106kPa 气压: 86kPa~106kPa If more strict measurement is required,measurement shall be made within following limits 如果需要更严格的测量, 应在下列范围内进行测量: Ambient temperature:20±2°C 环境温度: 20±2°C elative humidity:65±5% 相对湿度: 65±5% ir pressure:86kPa to 106kPa 气压: 86kPa~106kPa		

Recommended Soldering Technologies 推荐的焊接技术

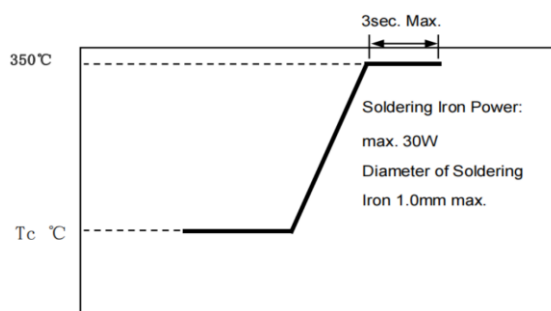
1、Re-flowing Profile回流焊接:

- ※Preheat condition预热条件: 150~200°C/60~180sec.
- ※Allowed time above 217°C允许217°C时间以上: 80~120sec.
- ※Max temp最高温度: 260°C
- ※Max time at max temp 最高温度下的最长时间: 10sec.
- ※Solder paste焊膏: Sn/3.0Ag/0.5Cu
- ※Allowed Reflow time:2 x max 允许回流时间: 最大2倍



2、Iron Soldering Profile 烙铁焊接

- ※Iron soldering power:Max.30W烙铁焊接功率: 最大30W
- ※Pre-heating预热: 150°C/60sec.
- ※Soldering time焊接时间: 3sec.Max.
- ※Solder paste焊膏: Sn/3.0Ag/0.5Cu
- ※Max.1 times for iron soldering烙铁焊最多1次



Tape Carrier Packaging胶带载体包装:

Series 系列	Standard Quantity (pcs/reel)
HPS0412	3000
HPS0420	3000
HPS0518	3000
HPS0520	2500
HPS0530	1500
HPS0618	2000
HPS0620	1500

Series 系列	Standard Quantity (pcs/reel)
HPS0624	1500
HPS0630	1000
HPS0650	1000
HPS0840	1000
HPS0850	1000
HPS1030	800
HPS1040	1000

Series 系列	Standard Quantity (pcs/reel)
HPS1050	800
HPS1340	500
HPS1350	500
HPS1360	500
HPS1365	400
HPS1770	250
HPS2213	100