

规格确认书

SPECIFICATION

客 户

CUSTOMER:

客 户 料 号

CUSTOMER P/N:

物 料 名 称

模压功率电感

MODEL NO :

Molded Power Inductors

料 号

HXC 系列

P/N :

HXC 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

碳基粉材料，高饱和电流，低 DCR。

优质材料，磁损低，效率高。

一体化磁屏蔽结构，EMC 效果极佳。

工作温度范围-40℃ 至 +125℃

●用途

高频开关电源、UPS 电源显卡、音箱功放。

笔记本电脑、平板电脑、电脑主机板。

视像设备、仪器仪表、机顶盒、DVD 机。

●品名系统

HXC	1040	-	4R7	M
①	②		③	④

① 产品代号: 模压式贴片功率电感。

② 尺寸规格: 0420=4.4×4.2×1.8(mm)

0530=5.7×5.2×2.8(mm)

0630=7.3×6.6×2.8(mm)

0650=7.3×6.6×4.8(mm)

1040=11×10×3.8(mm)

1350=13.5×12.6×4.8(mm)

1360=13.5×12.6×5.8(mm)

1770=17.5×17.0×6.7(mm)

③电感量标称值:4R7=4.7μH

④电感量公差:M=±20% N=±30%

●FEATURES

Carbonyl powder for large current and low DCR.

High quality material, low magnetic loss and high efficiency.

Integrated magnetic shielding structure, excellent EMC effect.

Operating temperature range -40℃ to +125℃

●Applications

High frequency switching power supply, UPS power supply graphics cards, audio amplifiers.

Notebooks, tablets, computer motherboard.

Video equipment, instrumentation, set-top boxes, DVD players.

●Product Identification

HXC	1040	-	4R7	M
①	②		③	④

① Product symbol: Molded SMD Power Inductors.

② Dimension: 0420=4.4×4.2×1.8(mm)

0530=5.7×5.2×2.8(mm)

0630=7.3×6.6×2.8(mm)

0650=7.3×6.6×4.8(mm)

1040=11×10×3.8(mm)

1350=13.5×12.6×4.8(mm)

1360=13.5×12.6×5.8(mm)

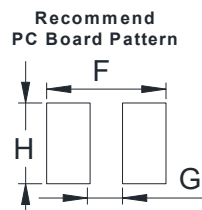
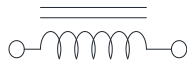
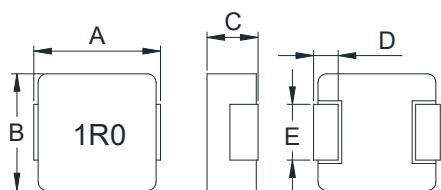
1770=17.5×17.0×6.7(mm)

③Inductance: 4R7=4.7μH

④Tolerance: M=±20% N=±30%

●结构及尺寸

Structure And Dimensions



Units : mm

series	A	B	C	D	E	F Typ.	G Typ	H Typ.
0420	4.4±0.35	4.2±0.25	1.8±0.2	0.76±0.3	2.0±0.2	5.2	2.2	2.3
0530	5.7±0.35	5.2±0.2	2.8±0.2	1.1±0.3	2.5±0.3	6.2	2.2	2.8
0630	7.3±0.30	6.6±0.3	2.8±0.2	1.8±0.3	3.0±0.3	8.4	2.5	3.5
0650	7.3±0.30	6.6±0.3	4.8±0.2	1.8±0.3	3.0±0.3	8.4	2.5	3.5
1040	11±0.50	10.0±0.3	3.8±0.2	2.3±0.3	2.5±0.5	13.6	5.4	3.5
1050	11±0.50	10.0±0.3	4.8±0.2	2.3±0.3	2.5±0.5	13.6	5.4	3.5
1350	13.5±0.5	12.5±0.3	4.8±0.2	2.3±0.3	4.5±0.5	14.2	8	5
1360	13.5±0.5	12.5±0.3	5.8±0.2	2.3±0.3	4.5±0.5	14.2	8	5
1365	13.5±0.5	12.5±0.3	6.2±0.3	2.3±0.3	4.5±0.5	14.2	8	5
1770	17.5±0.5	17.0±0.5	7.0MAX	2.1±0.3	11.9±0.3	18.5	12.2	12.5

●规格

Specifications

HXC 0420 系列 (TYPE)

Part Number	Inductance	DC Resistance		Heat Rating Current	Saturation Current
	100kHz,1V	Typ.	Max.	Typ.	Typ.
Units	μH	mΩ		A	
Symbol	L	DCR		Irms	Isat
HXC0420-R10N	0.10±30%	3.2	4	14	35
HXC0420-R15N	0.15±30%	4.2	5	14	31
HXC0420-R22N	0.22±30%	6.6	7.3	13	24
HXC0420-R33M	0.33±20%	7.8	8.6	10	18
HXC0420-R47M	0.47±20%	11.2	14	8	12
HXC0420-R56M	0.56±20%	13.5	16	7.3	10
HXC0420-R68M	0.68±20%	16	19	7	10
HXC0420-R82M	0.82±20%	19	23	6	9.5
HXC0420-1R0M	1.00±20%	22	27	5	8.5
HXC0420-1R5M	1.50±20%	35	42	4.5	7
HXC0420-2R2M	2.20±20%	51	61	4	6
HXC0420-3R3M	3.30±20%	69	76	3.5	4
HXC0420-4R7M	4.70±20%	95	105	2.6	3.5
HXC0420-5R6M	5.60±20%	112	125	2.2	3
HXC0420-6R8M	6.80±20%	150	172	2.1	2.8
HXC0420-8R2M	8.20±20%	158	180	2	2.5
HXC0420-100M	10.0±20%	215	243	1.8	2.3
HXC0420-150M	15.0±20%	325	374	1.5	1.9
HXC0420-220M	22.0±20%	470	500	1.2	1.4

HXC0530 系列 (TYPE)

Part Number	Inductance	DC Resistance		Heat Rating Current	Saturation Current
	100kHz,1V	Typ.	Max.	Typ.	Typ.
Units	μH	mΩ		A	
Symbol	L	DCR		I _{rms}	I _{sat}
HXC0530-R10N	0.10±30%	2.20	2.60	24.0	40.0
HXC0530-R15N	0.15±30%	2.50	3.00	22.0	37.0
HXC0530-R22M	0.22±20%	3.20	3.80	19.0	32.0
HXC0530-R33M	0.33±20%	4.30	5.00	15.0	20.0
HXC0530-R47M	0.47±20%	6.30	7.10	13.0	18.0
HXC0530-R56M	0.56±20%	7.80	8.60	12.0	17.0
HXC0530-R68M	0.68±20%	8.00	9.00	11.0	15.5
HXC0530-R82M	0.82±20%	8.80	10.0	10.0	14.0
HXC0530-1R0M	1.00±20%	11.0	12.7	9.00	13.0
HXC0530-1R5M	1.50±20%	14.4	16.6	8.00	11.5
HXC0530-2R2M	2.20±20%	26.0	29.2	7.00	11.0
HXC0530-3R3M	3.30±20%	33.0	38.0	6.00	9.00
HXC0530-4R7M	4.70±20%	48.0	53.0	5.50	8.00
HXC0530-5R6M	5.60±20%	54.0	62.0	4.70	7.30
HXC0530-6R8M	6.80±20%	68.0	76.2	4.20	6.00
HXC0530-100M	10.0±20%	104	120	3.50	4.00
HXC0530-150M	15.0±20%	165	190	2.70	3.20
HXC0530-220M	22.0±20%	217	250	2.20	2.70

HXC0630 系列 (TYPE)

Part Number	Inductance	DC Resistance		Heat Rating Current	Saturation Current
	100kHz,1V	Typ.	Max.	Typ.	Typ.
Units	μH	mΩ		A	
Symbol	L	DCR		I _{rms}	I _{sat}
HXC0630-R10N	0.10±30%	1.20	1.70	32.5	60.0
HXC0630-R15N	0.15±30%	1.50	1.90	27.0	45.0
HXC0630-R22N	0.22±30%	2.10	2.80	23.0	40.0
HXC0630-R33M	0.33±20%	3.50	3.90	20.0	32.0
HXC0630-R47M	0.47±20%	4.00	4.20	17.5	26.0
HXC0630-R56M	0.56±20%	4.70	5.00	16.5	25.5
HXC0630-R68M	0.68±20%	4.80	5.50	15.5	25.0
HXC0630-R82M	0.82±20%	6.70	8.00	13.0	24.0
HXC0630-1R0M	1.00±20%	8.30	10.0	11.0	22.0
HXC0630-1R5M	1.50±20%	13.0	15.0	9.00	18.0

HXC0630 系列 (TYPE)

Part Number	Inductance	DC Resistance		Heat Rating Current	Saturation Current
	100kHz,1V	Typ.	Max.	Typ.	Typ.
Units	μH	mΩ		A	
Symbol	L	DCR		Irms	Isat
HXC0630-2R2M	2.20±20%	18.0	20.0	8.00	14.0
HXC0630-3R3M	3.30±20%	28.0	30.0	6.00	13.5
HXC0630-4R7M	4.70±20%	37.0	40.0	5.50	10.0
HXC0630-5R6M	5.60±20%	43.0	48.0	5.00	9.00
HXC0630-6R8M	6.80±20%	54.0	60.0	4.50	8.00
HXC0630-8R2M	8.20±20%	64.0	68.0	4.00	7.50
HXC0630-100M	10.0±20%	75.0	85.0	3.50	6.00
HXC0630-120M	12.0±20%	81.0	93.0	3.30	5.50
HXC0630-150M	15.0±20%	107	123	3.00	4.00
HXC0630-180M	18.0±20%	140	160	2.50	4.00
HXC0630-220M	22.0±20%	165	190	2.00	3.50
HXC0630-270M	27.0±20%	185	220	2.00	3.00
HXC0630-330M	33.0±20%	200	240	2.00	2.50
HXC0630-400M	40.0±20%	283	340	1.90	2.30
HXC0630-470M	47.0±20%	302	363	1.75	2.00

HXC0650 系列 (TYPE)

Part Number	Inductance	DC Resistance		Heat Rating Current	Saturation Current
	100kHz,1V	Typ.	Max.	Typ.	Typ.
Units	μH	mΩ		A	
Symbol	L	DCR		Irms	Isat
HXC0650-R10N	0.10±30%	0.65	0.78	32.0	65.0
HXC0650-R15N	0.15±30%	1.30	1.70	30.0	50.0
HXC0650-R22N	0.22±20%	1.60	1.90	25.0	35.0
HXC0650-R33M	0.33±20%	2.50	3.00	25.0	32.0
HXC0650-R47M	0.47±20%	3.50	3.90	22.0	30.0
HXC0650-R56M	0.56±20%	3.60	4.20	20.0	27.0
HXC0650-R68M	0.68±20%	4.00	4.50	18.0	24.0
HXC0650-R82M	0.82±20%	4.60	4.90	16.5	22.0
HXC0650-1R0M	1.00±20%	6.10	6.50	15.0	20.0
HXC0650-1R5M	1.50±20%	8.60	9.00	12.0	16.5
HXC0650-2R2M	2.20±20%	11.2	12.0	10.0	14.0
HXC0650-3R3M	3.30±20%	19.0	20.9	8.00	12.0
HXC0650-4R7M	4.70±20%	28.0	30.8	6.50	10.0
HXC0650-5R6M	5.60±20%	43.5	49.0	6.00	9.00

HXC0650 系列 (TYPE)

Part Number	Inductance	DC Resistance		Heat Rating Current	Saturation Current
	100kHz,1V	Typ.	Max.	Typ.	Typ.
Units	μH	mΩ		A	
Symbol	L	DCR		Irms	Isat
HXC0650-6R8M	6.80±20%	46.0	51.5	5.50	8.50
HXC0650-8R2M	8.20±20%	56.0	63.0	5.00	8.00
HXC0650-100M	10.0±20%	60.0	69.0	4.00	7.50
HXC0650-150M	15.0±20%	81.0	92.0	3.50	6.00
HXC0650-220M	22.0±20%	140	170	2.50	5.50
HXC0650-330M	33.0±20%	173	200	2.00	3.50
HXC0650-470M	47.0±20%	290	330	1.90	2.70
HXC0650-560M	56.0±20%	342	396	1.60	2.10
HXC0650-680M	68.0±20%	386	445	1.20	2.00

HXC1040 系列 (TYPE)

Part Number	Inductance	DC Resistance		Heat Rating Current	Saturation Current
	100kHz,1V	Typ.	Max.	Typ.	Typ.
Units	μH	mΩ		A	
Symbol	L	DCR		Irms	Isat
HXC1040-R22M	0.22±20%	0.8	1	35	60
HXC1040-R36M	0.36±20%	1	1.2	31	60
HXC1040-R47M	0.47±20%	1.3	1.5	28	43
HXC1040-R56M	0.56±20%	1.6	1.8	25	40
HXC1040-R68M	0.68±20%	2.4	2.7	22	39
HXC1040-1R0M	1.0±20%	3	3.3	18	36
HXC1040-1R5M	1.5±20%	4	4.6	16	33
HXC1040-2R2M	2.2±20%	6.5	7	12	27
HXC1040-3R3M	3.3±20%	10.8	11.8	11	20
HXC1040-4R7M	4.7±20%	15	15.5	10	17
HXC1040-5R6M	5.6±20%	17	19.3	9	14
HXC1040-6R8M	6.8±20%	17.5	23.3	8.5	13.5
HXC1040-100M	10±20%	27	30	7.5	12
HXC1040-150M	15±20%	40	45	6.25	10
HXC1040-220M	22±20%	64	74	5	7
HXC1040-330M	33±20%	92	112	3.5	5
HXC1040-470M	47±20%	145	167	3	4.5
HXC1040-680M	68±20%	205	240	2	3

HXC1050 系列 (TYPE)

Part Number	Inductance	DC Resistance		Heat Rating Current	Saturation Current
	100kHz,1V	Typ.	Max.	Typ.	Typ.
Units	μH	mΩ		A	
Symbol	L	DCR		Irms	Isat
HXC1050-R22M	0.22	0.45	0.50	45.0	70.0
HXC1050-R47M	0.47	1.15	1.38	28.0	50.0
HXC1050-R56M	0.56	1.30	1.50	26.5	43.0
HXC1050-R82M	0.82	2.00	2.40	25.0	36.0
HXC1050-1R0M	1.00	2.80	3.50	22.0	30.0
HXC1050-1R5M	1.50	3.50	4.10	19.0	27.0
HXC1050-2R2M	2.20	5.40	6.00	16.0	24.0
HXC1050-3R3M	3.30	9.00	10.4	14.0	22.0
HXC1050-4R7M	4.70	10.0	12.5	13.0	19.0
HXC1050-5R6M	5.60	14.0	16.8	10.0	16.0
HXC1050-6R8M	6.80	16.5	21.0	9.50	15.0
HXC1050-8R2M	8.20	18.5	24.0	9.00	14.5
HXC1050-100M	10.0	25.0	29.0	8.00	13.5
HXC1050-150M	15.0	37.0	45.0	5.50	9.50
HXC1050-220M	22.0	50.0	60.0	5.00	9.00
HXC1050-330M	33.0	80.0	92.0	4.30	7.50
HXC1050-470M	47.0	125	145	3.80	6.50
HXC1050-680M	68.0	176	205	2.50	4.00
HXC1050-101M	100	315	380	2.00	3.00

HXC1350 系列 (TYPE)

Part Number	Inductance	DC Resistance		Heat Rating Current	Saturation Current
	100kHz,1V	Typ.	Max.	Typ.	Typ.
Units	μH±20%	mΩ		A	
Symbol	L	DCR		Irms	Isat
HXC1350-R22M	0.22	0.50	0.70	52.0	110
HXC1350-R33M	0.33	0.70	0.90	42.0	80.0
HXC1350-R47M	0.47	0.86	1.10	38.0	65.0
HXC1350-R56M	0.56	1.00	1.50	36.0	55.0
HXC1350-R68M	0.68	1.40	1.70	34.0	54.0
HXC1350-R82M	0.82	1.70	2.10	31.0	52.0
HXC1350-1R0M	1.00	1.85	2.50	29.0	50.0
HXC1350-1R5M	1.50	2.80	3.30	27.0	48.0
HXC1350-2R2M	2.20	4.20	5.50	20.0	32.0
HXC1350-3R3M	3.30	6.80	9.20	15.0	32.0

HXC1350 系列 (TYPE)

Part Number	Inductance	DC Resistance		Heat Rating Current	Saturation Current
	100kHz,1V	Typ.	Max.	Typ.	Typ.
Units	μH	mΩ		A	
Symbol	L	DCR		Irms	Isat
HXC1350-4R7M	4.70	11.4	15.0	12.0	27.0
HXC1350-5R6M	5.60	12.3	16.5	11.5	22.0
HXC1350-6R8M	6.80	14.5	18.5	11.0	21.0
HXC1350-8R2M	8.20	16.8	22.5	9.50	18.0
HXC1350-100M	10.0	21.4	25.5	9.00	16.0
HXC1350-150M	15.0	32.0	38.0	8.20	13.0
HXC1350-220M	22.0	50.0	58.0	6.50	10.0
HXC1350-330M	33.0	73.0	88.0	5.00	8.00
HXC1350-470M	47.0	100	120	4.00	6.50
HXC1350-680M	68.0	135	162	3.50	5.50
HXC1350-820M	82.0	198	238	3.00	4.80

HXC1360 系列 (TYPE)

Part Number	Inductance	DC Resistance		Heat Rating Current	Saturation Current
	100kHz,1V	Typ.	Max.	Typ.	Typ.
Units	μH±20%	mΩ		A	
Symbol	L	DCR		Irms	Isat
HXC1360-R47M	0.47	0.92	1.30	38.0	60.0
HXC1360-R56M	0.56	1.15	1.50	35.0	56.0
HXC1360-R68M	0.68	1.33	1.70	33.0	53.0
HXC1360-1R0M	1.00	1.80	2.40	29.0	45.0
HXC1360-1R5M	1.50	2.70	3.20	26.0	43.0
HXC1360-2R2M	2.20	4.00	4.70	21.0	34.0
HXC1360-3R3M	3.30	5.80	7.10	17.0	28.0
HXC1360-4R7M	4.70	9.50	11.5	16.0	25.0
HXC1360-5R6M	5.60	10.8	12.6	15.5	22.0
HXC1360-6R8M	6.80	12.0	13.8	15.0	19.0
HXC1360-8R2M	8.20	13.6	16.0	11.0	17.0
HXC1360-100M	10.0	18.0	20.7	11.0	15.5
HXC1360-150M	15.0	25.0	29.0	9.00	13.0
HXC1360-180M	18.0	30.0	35.0	8.50	12.0
HXC1360-220M	22.0	34.0	39.5	8.00	11.0
HXC1360-330M	33.0	65.0	75.0	6.00	8.00
HXC1360-470M	47.0	80.0	90.0	5.50	7.00
HXC1360-560M	56.0	101	118	5.30	6.50

HXC1360 系列 (TYPE)

Part Number	Inductance	DC Resistance		Heat Rating Current	Saturation Current
	100kHz,1V	Typ.	Max.	Typ.	Typ.
Units	μH	mΩ		A	
Symbol	L	DCR		Irms	Isat
HXC1360-680M	68.0	120	140	5.00	6.00
HXC1360-820M	82.0	138	161	4.50	5.50
HXC1360-101M	100	180	200	4.00	5.00
HXC1360-121M	120	210	235	3.50	4.50
HXC1360-151M	150	300	350	3.00	4.00
HXC1360-171M	170	345	415	2.50	3.50
HXC1360-221M	220	480	550	2.00	3.00

HXC1365 系列 (TYPE)

Part Number	Inductance	DC Resistance		Heat Rating Current	Saturation Current
	100kHz,1V	Typ.	Max.	Typ.	Typ.
Units	μH±20%	mΩ		A	
Symbol	L	DCR		Irms	Isat
HXC1365-R15M	0.15	0.49	0.60	55.0	118
HXC1365-R22M	0.22	0.47	0.60	53.0	112
HXC1365-R33M	0.33	0.65	0.80	46.0	68.0
HXC1365-R47M	0.47	0.90	1.20	41.0	63.0
HXC1365-R56M	0.56	1.05	1.20	37.0	58.0
HXC1365-R68M	0.68	1.25	1.50	35.0	55.0
HXC1365-R82M	0.82	1.50	1.90	33.0	50.0
HXC1365-1R0M	1.00	1.70	2.30	30.0	48.0
HXC1365-1R5M	1.50	2.50	3.00	27.0	45.0
HXC1365-2R2M	2.20	3.80	4.20	22.0	37.0
HXC1365-3R3M	3.30	5.70	6.80	18.0	30.0
HXC1365-4R7M	4.70	7.00	8.40	13.5	28.0
HXC1365-5R6M	5.60	8.50	10.0	12.5	23.0
HXC1365-6R8M	6.80	9.50	11.5	11.5	18.0
HXC1365-8R2M	8.20	12.0	15.5	10.5	16.0
HXC1365-100M	10.0	13.2	16.5	10.0	15.5
HXC1365-150M	15.0	23.2	28.0	9.00	12.5
HXC1365-220M	22.0	32.5	37.0	9.00	12.0
HXC1365-330M	33.0	48.0	58.0	8.00	11.0
HXC1365-470M	47.0	76.0	90.0	6.50	9.50
HXC1365-680M	68.0	110	130	4.80	7.80
HXC1365-820M	82.0	135	155	4.50	6.50
HXC1365-101M	100	145	165	4.20	5.50

HXC1770 系列 (TYPE)

Part Number	Inductance	DC Resistance		Heat Rating Current	Saturation Current
	100kHz,1V	Typ.	Max.	Typ.	Typ.
Units	μH	mΩ		A	
Symbol	L	DCR		Irms	Isat
HXC1770-R33M	0.33	0.75	0.90	70.0	90.0
HXC1770-R47M	0.47	0.95	1.03	62.0	80.0
HXC1770-R82M	0.82	1.40	1.80	53.0	65.0
HXC1770-1R0M	1.00	1.60	2.00	52.0	60.0
HXC1770-1R5M	1.50	2.00	2.50	47.0	52.0
HXC1770-2R2M	2.20	2.40	2.70	43.5	47.0
HXC1770-3R3M	3.30	3.50	3.90	28.0	45.0
HXC1770-4R7M	4.70	4.80	5.50	25.0	41.0
HXC1770-5R6M	5.60	5.80	7.05	21.0	40.0
HXC1770-6R8M	6.80	8.40	9.20	19.0	32.0
HXC1770-8R2M	8.20	9.60	10.8	18.0	25.0
HXC1770-100M	10.0	11.8	13.0	16.5	24.0
HXC1770-150M	15.0	17.8	20.5	12.5	23.0
HXC1770-220M	22.0	25.1	26.5	12.0	18.0
HXC1770-330M	33.0	38.0	44.0	10.7	15.0
HXC1770-470M	47.0	48.0	55.0	8.70	9.50
HXC1770-560M	56.0	54.0	62.0	7.80	9.00
HXC1770-680M	68.0	68.0	80.0	7.00	8.00
HXC1770-820M	82.0	87.0	100	5.70	7.00
HXC1770-101M	100	102	118	5.30	6.50

Notes

All test data is referenced to 25°C ambient.

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

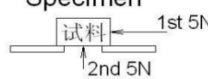
Irms (A): DC current (A) that will cause an approximate ΔT of 40°C. (reference ambient temperature is 25°C)

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.

● 可靠性和测试条件

● Reliability and Test Condition

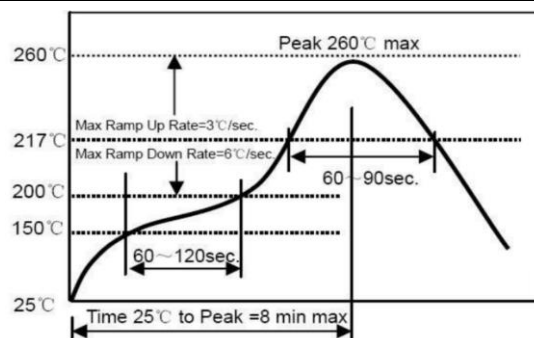
Item 项目	Specification and Requirement 项目规范和要求	Test Method 试验方法
Solder ability 焊锡附着性	New solder shall cover 95% minimum of the surface immersed. 95%以上的面积要被覆盖。	Terminals shall be immersed for 5 to 10 seconds in flux at room temperature. Dip sample into solder bath containing molten solder at $260 \pm 5^\circ\text{C}$ 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: 10~55~10Hz Amplitude: 1.5mm Sweep time: 1min Test Directions: X,Y,Z Test Time: 2 hours each direction. 振动频率10~55~10Hz, 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	$-40 \sim +125^\circ\text{C}$	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℃~35℃ 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℃ to 35℃ 环境温度: 5℃~35℃ relative humidity:45%to 85% 相对湿度: 45%~85% air 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℃ 环境温度: 20±2℃ relative humidity:65±5% 相对湿度: 65±5% air pressure:86kPa to 106kPa 气压: 86kPa~106kPa		

Recommended Soldering Technologies 推荐的焊接技术

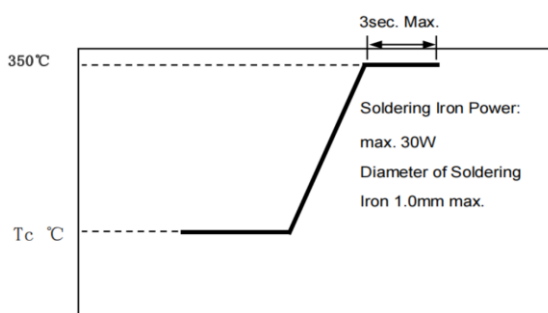
1、Re-flowing Profile回流焊接:

- ※Preheat condition预热条件: 150~200℃/60~180sec.
- ※Allowed time above 217℃允许217℃时间以上: 80~120sec.
- ※Max temp最高温度: 260℃
- ※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℃/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	Quantity (pcs/reel)
HXC0420	3000
HXC0530	2000
HXC0630	1000
HXC0650	1000
HXC1040	1000

Series 系列	Quantity (pcs/reel)
HXC1050	500
HXC1350	500
HXC1360	500
HXC1365	500
HXC1770	200