



承认书

Approval Sheet

客户名称:

Customer

/

产品名称:

大电流绕线片式电感器

Part Name

High Current Wire Wound Inductor

产品规格:

Specification

JWIH Series

版本号:

Version No.

A/0

日期:


Date

2020-7-3

制造Manufacturer			客户Customer		
拟制	审核	确认	检验	审核	批准
Draft by	Checked by	Approve by	Check by	Checked by	Approval by
周昶	杨岚	唐涛			

序号No	目录 TABLE OF CONTENTS
1	产品指南Products Guide
2	特征Characteristics
3	应用Application
4	形状和尺寸Shape And Dimensions
5	规格Specifications
6	焊接条件Soldering Conditions
7	产品包装 Packaging
8	可靠性测试Reliability testing

产品指南 Products Guide

Description	Model	P/N	Package Size	Inductance Range (uH)	Irms (mA)
High Current Wire Wound Inductor 大电流绕线片式电感器		JWIH	0603(1608)	1.0-22	200-800
			0805(2012)	2.2-22	240-740

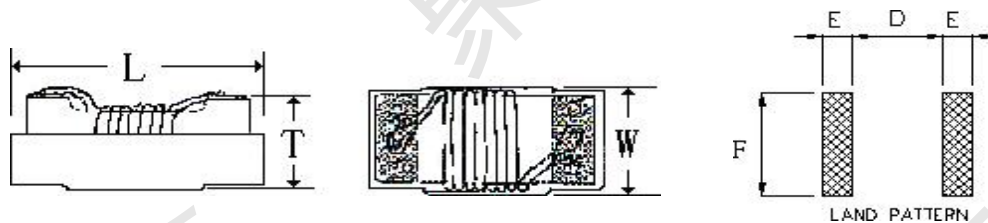
Characteristics 特征

- 绕线贴片结构，高Q值；
- 大电流，低电阻；
- 自谐振频率高，对高频噪声有良好的抑制效果；
- 节省空间，节省用电。

Application 应用

- 智能手机，智能电视，机顶盒；
- 通讯设备，USB接口，LCD的LVDS信号线；
- 虚拟现实设备；
- 信息处理系统。

形状和尺寸 Shape And Dimensions (Unit: mm)



Size 型号	L(MAX)	W(MAX)	T(MAX)	E(Typ.)	F(Typ.)	D(Typ.)
JWIH0603 (1608)	1.8	1.25	1.2	0.64	1.02	0.64
JWIH0805 (2012)	2.4	1.73	1.52	1.02	1.78	0.76

Product Spec. Model 产品品名构成

JWI H 0603 - 2R2 K S - LF
(1) (2) (3) (4) (5) (6) (7)

- (1)Product symbol系列代号
- (2)Material芯片类型 (C:陶瓷 F: 铁氧体 H:合金)
- (3)Dimensions 规格尺寸
- (4)Inductance电感量: 1N0=1.0nH、010=10nH、R10=100nH、1R0=1.0μH、100=10μH、101=100μH、102=1mH
- (5)Tolerance公差: S±0.3; F±1%; G±2%; J±5%; K±10%; L±15%; M±20%
- (6)Terminal端电极材料: G-金端头; S-锡端头; Y-银钯端头
- (7)E.P.环保: LF—Lead Free HF—Halogen Free FP—Red Phosphor Free.

Specifications规格

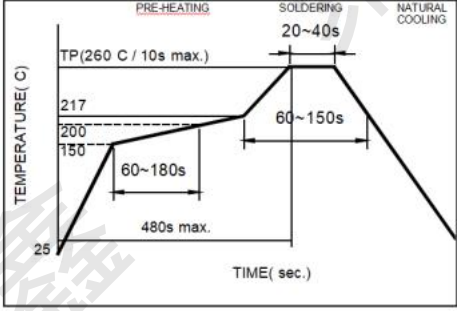
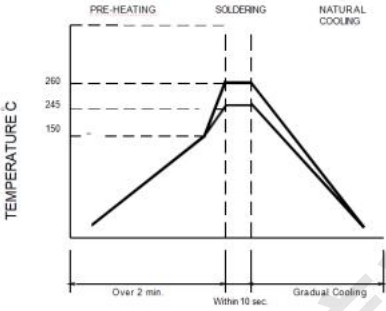
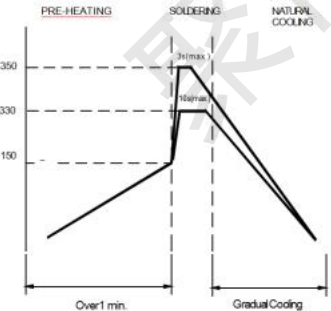
JWIH0603 Series

型号规格 Part NO.	精度级别 accuracy grade	感量 Inductance (μH)	Q 值测试频率 TestFreq (MHz)	Q值 QMin	自谐振频率 SRF (MHz)Min	直流电阻 Rdc (Ω) Max	额定电流 Irms (mA) Max
JWIH0603-1R0KS-HF	K	1	7.9	12	390	0.41	800
JWIH0603-2R2KS-HF	K	2.2	7.9	12	50	0.5	600
JWIH0603-4R7KS-HF	K	4.7	7.9	12	51	1.26	400
JWIH0603-100KS-HF	K	10	2.5	14	36	2.4	280
JWIH0603-150KS-HF	K	15	2.5	12	29	3.38	220
JWIH0603-220KS-HF	K	22	2.5	12	24	4.69	200

JWIH0805 Series

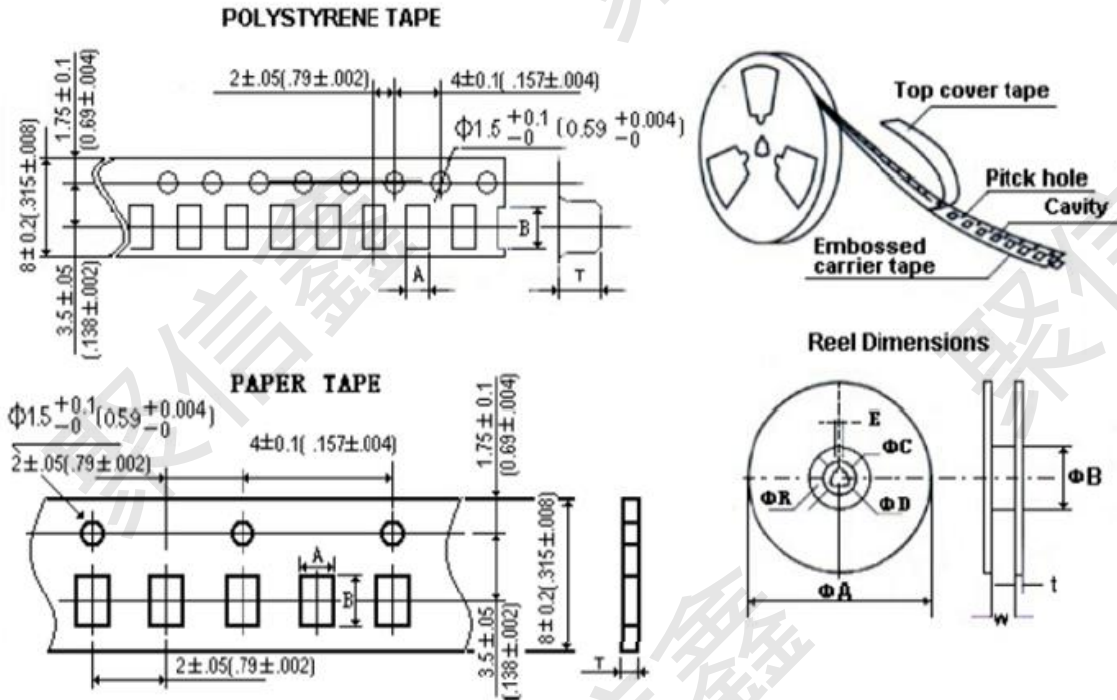
型号规格 Part NO.	精度级别 accuracy grade	感量 Inductance (μH)	Q 值测试频率 TestFreq (MHz)	Q值 QMin	自谐振频率 SRF (MHz)Min	直流电阻 Rdc (Ω) Max	额定电流 Irms (mA) Max
JWIH0805-2R2KS-HF	K	2.2	7.9	12	80	0.31	740
JWIH0805-4R7KS-HF	K	4.7	7.9	14	51	0.56	520
JWIH0805-100KS-HF	K	10	2.5	14	25	1.17	300
JWIH0805-150KS-HF	K	15	2.5	15	28	1.82	300
JWIH0805-220KS-HF	K	22	2.5	15	20	2.29	240

焊接条件 Soldering Conditions

Items	Test Methods and Remarks	Requirements
<p>Figure 1. Re-flow Soldering (Lead Free)</p>		<p>Note:</p> <ul style="list-style-type: none"> ·Preheat circuit and products to 150°C ·280°C tip temperature (max)
<p>Figure 2. Wave Soldering</p>		<p>Note:</p> <ul style="list-style-type: none"> ·Never contact the ceramic with the iron tip ·1.0mm tip diameter (max)
<p>Figure 3. Hand Soldering</p>		<p>Note:</p> <ul style="list-style-type: none"> ·Use a 20 watt soldering iron with tip diameter of 1.0mm ·Limit soldering time to 3 sec.

产品包装 Packaging(unit: mm)

Tape



Part NO.		A	B	T
纸带	0402	0.74	1.23	0.6
胶带	0603	1.15	1.83	0.95
	0805	1.85	2.4	1.45
	1008	2.73	2.9	2.34
	1210	2.96	3.6	2.4

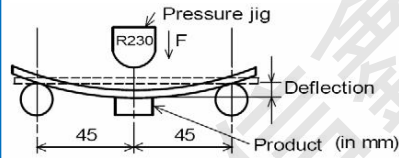
unit	ΦA	ΦB	ΦC	ΦD	E	W	t	R
mm	178	60	13	21	2	10	2	1
	330	75	13	23	2	12	2	1

包装数量 (单位: 粒) Packaging number (Unit: Pcs)

规格	0402	0603	0805	1008	1210
数量(pcs)	10000	4000	3000	2000	2000

可靠性测试 Reliability testing

TEST ITEM	SPECIFICATION	TEST CONDITION
Rating current	According to product specifications	Current sources:33010D
Inductance	According to product specifications	Test Frequency:0.252~250MHz Test Equipment:HP4291A、HP4286A、HP4287A、HP4284A Test Fixture:16193Aor16334A
Q	According to product specifications	Test Frequency:0.252~1500MHz Test Equipment:HP4291A、HP4286A、HP4287A、Test Fixture:16193Aor16334A
RDC	According to product specifications	Test Equipment:HP4263B
SRF	According to product specifications	Test Equipment:HP4291A Test Fixture:16193A
Solderability	The metalized area must have more then 90%of solder coverage	Soldering Temp:230±5℃ Dipping time:5±1S
Resistance to soldering heat	No evidence of mechanical damage The mealized arer must have more then 75%of solder coverage Inductance change,less than±5% Q change less than±10%	Soldering Temp:260±5℃ Dipping time:10±1S
Thermal Shock	No evidence of mechanical damage, Inductance change less than±5%, Q change less than±10%	A cycle contain:Step1:-40℃, 30Min Step 2:85℃, 30Min Cycle Times:10

TEST ITEM	SPECIFICATION	TEST CONDITION
High Temperature Storage	No evidence of mechanical damage, Inductance change less than $\pm 5\%$, Q change less than $\pm 10\%$	Test Temperature: $125\pm 2^{\circ}\text{C}$ (Ceramic core) $85\pm 2^{\circ}\text{C}$ (Ferrite core) Test Time: 96 ± 2 Hours
Low Temperature Storage	No evidence of mechanical damage, Inductance change less than $\pm 5\%$, Q change less than $\pm 10\%$	Test Temperature: $-40\pm 2^{\circ}\text{C}$ Test Time: 96 ± 2 Hours
Moisture Resistance	No evidence of mechanical damage, Inductance change less than $\pm 5\%$, Q change less than $\pm 10\%$	Test Temperature: $50\pm 2^{\circ}\text{C}$ Test Time:100Hours relative humidity: $90\sim 95\%$
Vibration	No evidence of mechanical damage, Inductance change less than $\pm 5\%$, Q change less than $\pm 10\%$	Amplitude: 1.5mm X、Y、Z each direction for 1Hour and 45min Frequency range: $10\sim 55\sim 10\text{Hz}$ (min)
Component Adhesion	No evidence of mechanical damage No evidence of peel off or broken Keep continuity of Winding	Force: 2Kg Test Time: 5 ± 1 sec
Resistance to bend	No evidence of mechanical damage	Camber: 20mm Test Board:Glass-Epoxy board board Thickness: 8mm 
Life	No evidence of mechanical damage, Inductance change less than $\pm 5\%$, Q change less than $\pm 10\%$	Test Temperature: $85\pm 2^{\circ}\text{C}$ Test Time:1000Hours with rating current