



承认书

Approval Sheet

客户名称:

Customer

/

产品名称:

铁氧体绕线片式电感器

Part Name

Wire Wound Ferrite Inductor

产品规格:

Specification

JWIF 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
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履历表 Resume

版本 Version No.	修改明细 Modify Details	日期 Date
A/0	新制定	2020-7-3

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产品指南Products Guide

Description	Model	P/N	Package Size	Inductance Range (uH)	Irms (mA)
Wire Wound Ferrite Inductor 铁氧体绕线片式电感器 		JWIF	4020(1005)	20-820	90-1600
			0603(1608)	0.1-22	100-1000
			0805(2012)	0.1-100	30-720
			1008(2520)	0.56-82	100-700
			1210(3225)	0.56-620	10-820
			1812(4532)	0.33-1000	90-1000

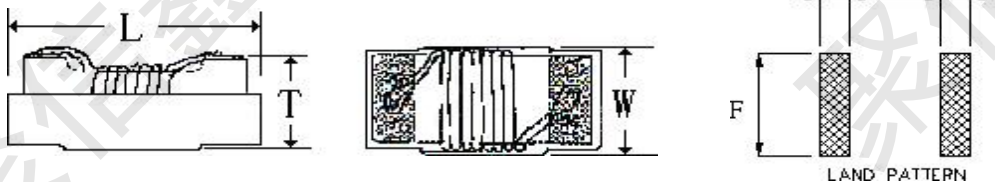
Characteristics特征

- 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.)
JWIF0402 (1005)	1.19	0.7	0.64	0.4	0.64	0.64
JWIF0603 (1608)	1.8	1.25	1.2	0.64	1.02	0.64
JWIF0805 (2012)	2.4	1.73	1.52	1.02	1.78	0.76
JWIF1008 (2520)	2.92	2.8	2.23	1.02	2.54	1.27
JWIF1210 (3225)	3.5	2.9	2.25	1.02	2.54	1.78
JWIF1812 (4532)	4.95	3.85	3.43	1.14	3.05	3

Product Spec. Model 产品品名构成

JWI F 0402 - 20N J S
(1) (2) (3) (4) (5) (6)

(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 按客户要求

Specifications规格

JWIF0402 Series

型号规格 Part NO.	精度级别 accuracy grade	感量 Inductance (nH)	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 I _{rms} (mA) Max
JWIF0402-20N□□	J、K	20	7.9		2600	0.05	1600
JWIF0402-22N□□	J、K	22	7.9		2500	0.065	1300
JWIF0402-33N□□	J、K	33	7.9		2300	0.06	1400
JWIF0402-36N□□	J、K	36	7.9		2300	0.075	1300
JWIF0402-39N□□	J、K	39	7.9		2200	0.115	830
JWIF0402-51N□□	J、K	51	7.9		1930	0.07	1100
JWIF0402-56N□□	J、K	56	7.9		1900	0.095	1000
JWIF0402-72N□□	J、K	72	7.9		1650	0.1	1000
JWIF0402-78N□□	J、K	78	7.9		1600	0.13	970
JWIF0402-R10□□	J、K	100	7.9		1400	0.16	900
JWIF0402-R14□□	J、K	140	7.9		1220	0.26	630
JWIF0402-R18□□	J、K	180	7.9		1150	0.28	560
JWIF0402-R20□□	J、K	200	7.9		1000	0.44	400
JWIF0402-R22□□	J、K	220	7.9		1150	0.53	380
JWIF0402-R25□□	J、K	250	7.9		900	0.36	520
JWIF0402-R27□□	J、K	270	7.9		860	0.9	360
JWIF0402-R30□□	J、K	300	7.9		860	0.41	420
JWIF0402-R33□□	J、K	330	7.9		820	0.56	350
JWIF0402-R36□□	J、K	360	7.9		810	0.575	300
JWIF0402-R39□□	J、K	390	7.9		760	1	300
JWIF0402-R42□□	J、K	420	7.9		700	0.7	340
JWIF0402-R47□□	J、K	470	7.9		650	0.73	310
JWIF0402-R56□□	J、K	560	7.9		600	1.2	200
JWIF0402-R82□□	J、K	820	7.9		385	5.85	90

注: JWIF0402铁氧体Q值很低, 不作标识。

JWIF0603 Series

型号规格 Part NO.	精度级别 accuracy grade	感量 Inductance (μ H)	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
JWIF0603-R10□□	J、K	0.1	7.9	12	1150	0.13	1000
JWIF0603-R18□□	J、K	0.18	7.9	12	950	0.2	1000
JWIF0603-R22□□	J、K	0.22	7.9	12	775	0.3	700
JWIF0603-R27□□	J、K	0.27	7.9	12	775	0.3	700
JWIF0603-R33□□	J、K	0.33	7.9	12	725	0.32	600
JWIF0603-R39□□	J、K	0.39	7.9	12	620	0.51	500
JWIF0603-R47□□	J、K	0.47	7.9	12	540	0.62	420
JWIF0603-R51□□	J、K	0.51	7.9	12	600	0.65	400
JWIF0603-R56□□	J、K	0.56	7.9	12	600	0.65	400
JWIF0603-R68□□	J、K	0.68	7.9	12	500	1	380
JWIF0603-R75□□	J、K	0.75	7.9	12	500	1.3	350
JWIF0603-R82□□	J、K	0.82	7.9	12	500	1.3	350
JWIF0603-1R0□□	J、K	1	7.9	12	400	1.5	330
JWIF0603-1R2□□	J、K	1.2	7.9	12	380	1.7	320
JWIF0603-1R5□□	J、K	1.5	7.9	12	300	1.9	310
JWIF0603-1R8□□	J、K	1.8	7.9	12	180	2.2	300
JWIF0603-2R0□□	J、K	2	7.9	12	180	2.3	280
JWIF0603-2R2□□	J、K	2.2	7.9	12	180	2.3	280
JWIF0603-2R7□□	J、K	2.7	7.9	12	150	2.6	250
JWIF0603-3R3□□	J、K	3.3	7.9	12	150	2.9	230
JWIF0603-3R9□□	J、K	3.9	7.9	12	120	3.2	210
JWIF0603-4R7□□	J、K	4.7	7.9	12	100	4	200
JWIF0603-5R1□□	J、K	5.1	7.9	15	32	2.6	240
JWIF0603-5R6□□	J、K	5.6	7.9	15	32	2.6	240
JWIF0603-6R8□□	J、K	6.8	7.9	12	31	3.9	200
JWIF0603-8R2□□	J、K	8.2	7.9	12	26	4.2	190
JWIF0603-100□□	J、K	10	2.5	10	25	4.8	180
JWIF0603-150□□	J、K	15	2.5	10	23	8.5	170
JWIF0603-180□□	J、K	18	2.5	10	22	10	160
JWIF0603-220□□	J、K	22	2.5	10	10	12	100

JWIF0805 Series

型号规格 Part NO.	精度级别 accuracy grade	感量 Inductance (μ H)	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
JWIF0805-R10□□	J、K	0.1	7.9	19	340	0.69	500
JWIF0805-R15□□	J、K	0.15	7.9	19	480	0.3	600
JWIF0805-R22□□	J、K	0.22	7.9	19	480	0.4	600
JWIF0805-R33□□	J、K	0.33	7.9	19	500	0.31	720
JWIF0805-R39□□	J、K	0.39	7.9	19	500	0.31	720
JWIF0805-R47□□	J、K	0.47	7.9	19	500	0.31	720
JWIF0805-R68□□	J、K	0.68	7.9	19	400	0.46	590
JWIF0805-R88□□	J、K	0.88	7.9	12	360	1	520
JWIF0805-R91□□	J、K	0.91	7.9	12	360	1	500
JWIF0805-1R0□□	J、K	1	7.9	12	360	1	430
JWIF0805-1R2□□	J、K	1.2	7.9	12	350	1.15	410
JWIF0805-1R5□□	J、K	1.5	7.9	12	300	1.2	400
JWIF0805-1R8□□	J、K	1.8	7.9	12	300	1.35	380
JWIF0805-2R2□□	J、K	2.2	7.9	12	170	1.5	350
JWIF0805-2R7□□	J、K	2.7	7.9	12	100	1.7	320
JWIF0805-3R3□□	J、K	3.3	7.9	12	90	1.8	300
JWIF0805-3R9□□	J、K	3.9	7.9	12	90	1.95	280
JWIF0805-4R7□□	J、K	4.7	7.9	12	85	2.05	250
JWIF0805-5R6□□	J、K	5.6	7.9	12	70	2.3	240
JWIF0805-6R8□□	J、K	6.8	7.9	12	55	2.6	220
JWIF0805-8R0□□	J、K	8	7.9	12	50	3	180
JWIF0805-8R2□□	J、K	8.2	7.9	12	50	3	180
JWIF0805-100□□	J、K	10	2.5	10	30	3.2	150
JWIF0805-120□□	J、K	12	2.5	10	17	3.5	100
JWIF0805-150□□	J、K	15	2.5	10	16	4.2	100
JWIF0805-220□□	J、K	22	2.5	10	14	6	80
JWIF0805-390□□	J、K	39	2.5	10	14	10	60
JWIF0805-470□□	J、K	47	2.5	10	14	13.8	55
JWIF0805-560□□	J、K	56	2.5	10	8	14	30
JWIF0805-101□□	J、K	100	1	8	5	25	30

JWIF1008 Series

型号规格 Part NO.	精度级别 accuracy grade	感量 Inductance (μ H)	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 I _{rms} (mA) Max
JWIF1008-R56□□	J、K	0.56	7.9	12	230	0.62	700
JWIF1008-R68□□	J、K	0.68	7.9	12	230	0.62	700
JWIF1008-R82□□	J、K	0.82	7.9	12	230	0.62	700
JWIF1008-1R0□□	J、K	1	7.9	18	230	0.62	700
JWIF1008-1R2□□	J、K	1.2	7.9	18	210	0.68	650
JWIF1008-1R5□□	J、K	1.5	7.9	18	190	0.76	630
JWIF1008-1R8□□	J、K	1.8	7.9	18	170	0.84	600
JWIF1008-2R2□□	J、K	2.2	7.9	18	150	1.1	520
JWIF1008-2R7□□	J、K	2.7	7.9	18	135	1.28	490
JWIF1008-3R3□□	J、K	3.3	7.9	18	120	1.46	450
JWIF1008-3R9□□	J、K	3.9	7.9	18	105	1.56	420
JWIF1008-4R7□□	J、K	4.7	7.9	18	90	2	400
JWIF1008-5R6□□	J、K	5.6	7.9	15	80	1.8	380
JWIF1008-6R8□□	J、K	6.8	7.9	15	70	2	360
JWIF1008-8R2□□	J、K	8.2	7.9	15	65	2.65	330
JWIF1008-10□□	J、K	10	2.5	12	60	2.95	300
JWIF1008-18□□	J、K	18	2.5	12	26	4	160
JWIF1008-22□□	J、K	22	2.5	12	22	6.14	270
JWIF1008-24.7□□	J、K	24.7	2.5	12	12	6.25	210
JWIF1008-30□□	J、K	30	2.5	10	12	6.8	200
JWIF1008-33□□	J、K	33	2.5	10	12	7	200
JWIF1008-39□□	J、K	39	2.5	10	16	10	170
JWIF1008-47□□	J、K	47	2.5	10	10	10.7	160
JWIF1008-56□□	J、K	56	2.5	10	8	12	170
JWIF1008-68□□	J、K	68	2.5	10	6	13.5	145
JWIF1008-82□□	J、K	82	2.5	8	6	20	100

JWIF1210 Series

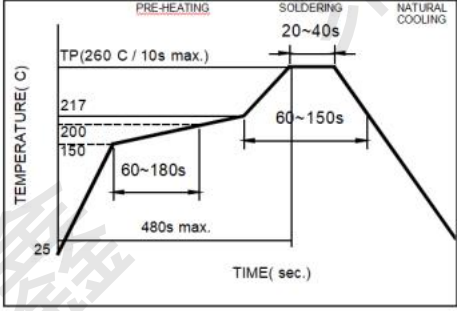
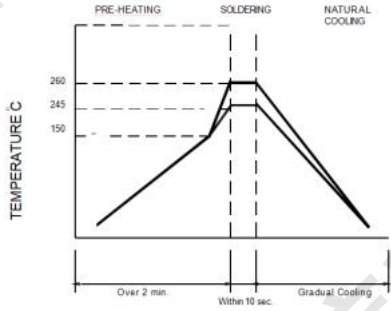
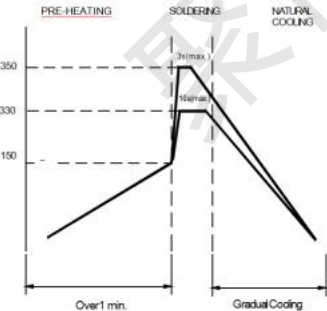
型号规格 Part NO.	精度级别 accuracy grade	感量 Inductance (μ H)	Q 值测试频率 TestFreq (MHz)	Q值 QMin	自谐振频率 SRF (MHz)Min	直流电阻 Rdc(Ω) Max	额定电流 Irms (mA) Max
JWIF1210-R56□□	J、K	0.56	25	20	180	0.55	450
JWIF1210-1R0□□	J、K	1	25	45	340	1.85	820
JWIF1210-1R5□□	J、K	1.5	7.9	20	200	0.4	450
JWIF1210-1R8□□	J、K	1.8	7.9	20	195	0.8	450
JWIF1210-2R2□□	J、K	2.2	7.9	20	175	0.8	450
JWIF1210-4R7□□	J、K	4.7	7.9	18	60	1.3	350
JWIF1210-5R6□□	J、K	5.6	2.5	18	50	2	320
JWIF1210-100□□	J、K	10	2.5	15	30	1	300
JWIF1210-150□□	J、K	15	2.5	15	22	2	225
JWIF1210-180□□	J、K	18	2.5	15	22	2.05	215
JWIF1210-220□□	J、K	22	2.5	15	20	2.4	210
JWIF1210-270□□	J、K	27	0	0	0	0	0
JWIF1210-330□□	J、K	33	2.5	15	15	2.9	160
JWIF1210-470□□	J、K	47	2.5	15	10	5.2	140
JWIF1210-560□□	J、K	56	2.5	8	8	5.6	125
JWIF1210-680□□	J、K	68	1	6	10	13	100
JWIF1210-820□□	J、K	82	1	6	10	13	100
JWIF1210-101□□	J、K	100	1	6	10	13	100
JWIF1210-121□□	J、K	100	1	6	10	13	100
JWIF1210-151□□	J、K	150	1	10	4	20	80
JWIF1210-181□□	J、K	180	1	8	3	14.5	70
JWIF1210-201□□	J、K	200	1	8	3	30	65
JWIF1210-221□□	J、K	220	1	8	3	30	65
JWIF1210-271□□	K	270	1	8	2	33	60
JWIF1210-331□□	K	330	1	8	2	35	55
JWIF1210-471□□	K	470	1	8	2	42	40
JWIF1210-561□□	K	560	1	8	2	60	10
JWIF1210-621□□	K	620	1	8	2	85	10

JWIF1812 Series

型号规格 Part NO.	精度级别 accuracy grade	感量 Inductance (μ H)	感量测试频率 Ls Test frequency (MHz)	Q值 QMi n	Q 值测 试频率 TestFreq (MHz)	直流电 阻 Rdc(Ω) Max	测试电 压Test voltage (mV)	自谐振频 率SRF (MHz) min	额定电 流Idc (mA) max
JWIF1812-R33□□	J、K	0.33	25.2	10	25.2	0.13	500	380	1000
JWIF1812-R56□□	J、K	0.56	25.2	10	25.2	0.15	500	300	1000
JWIF1812-R82□□	J、K	0.82	25.2	10	25.2	0.2	500	250	1000
JWIF1812-1R0□□	J、K	1	7.96	15	7.96	0.22	500	200	1000
JWIF1812-1R2□□	J、K	1.2	7.96	15	7.96	0.35	500	200	1000
JWIF1812-1R5□□	J、K	1.5	7.96	15	7.96	0.32	500	180	1000
JWIF1812-1R8□□	J、K	1.8	7.96	15	7.96	0.35	500	160	950
JWIF1812-2R2□□	J、K	2.2	7.96	15	7.96	0.37	500	150	900
JWIF1812-2R7□□	J、K	2.7	7.96	15	7.96	0.37	500	145	850
JWIF1812-3R3□□	J、K	3.3	7.96	15	7.96	0.48	500	140	800
JWIF1812-3R9□□	J、K	3.9	7.96	15	7.96	0.6	500	135	750
JWIF1812-4R7□□	J、K	4.7	7.96	15	7.96	1	500	120	700
JWIF1812-5R6□□	J、K	5.6	7.96	15	7.96	0.55	500	110	650
JWIF1812-6R8□□	J、K	6.8	7.96	15	7.96	0.8	500	80	600
JWIF1812-8R2□□	J、K	8.2	7.96	10	7.96	0.85	500	70	600
JWIF1812-100□□	J、K	10	2.52	10	2.52	1	500	65	550
JWIF1812-120□□	J、K	12	2.52	10	2.52	1.1	500	55	550
JWIF1812-150□□	J、K	15	2.52	10	2.52	1.2	500	35	500
JWIF1812-180□□	J、K	18	2.52	10	2.52	1.2	500	29	500
JWIF1812-220□□	J、K	22	2.52	10	2.52	1.3	500	20	450
JWIF1812-270□□	J、K	27	2.52	10	2.52	1.5	500	20	400
JWIF1812-330□□	J、K	33	2.52	10	2.52	1.7	500	18	350
JWIF1812-390□□	J、K	39	2.52	10	2.52	1.8	500	14	350
JWIF1812-470□□	J、K	47	2.52	10	2.52	2	500	10	300
JWIF1812-560□□	J、K	56	2.52	10	2.52	2.2	500	10	290
JWIF1812-680□□	J、K	68	2.52	10	2.52	2.4	500	5.4	260
JWIF1812-820□□	J、K	82	2.52	10	2.52	2.8	500	5.2	240
JWIF1812-101□□	J、K	100	0.796	10	0.796	3	500	4	220
JWIF1812-121□□	J、K	120	0.796	10	0.796	3.3	500	3.3	220
JWIF1812-151□□	J、K	150	0.796	10	0.796	3.7	500	3	200
JWIF1812-181□□	J、K	180	0.796	10	0.796	4.5	500	3	200
JWIF1812-221□□	J、K	220	0.796	10	0.796	8	500	2.5	170
JWIF1812-271□□	J、K	270	0.796	10	0.796	8.5	500	2.2	160
JWIF1812-331□□	K	330	0.796	10	0.796	9	500	2	150
JWIF1812-391□□	K	390	0.796	10	0.796	9.5	500	1.8	130
JWIF1812-471□□	K	470	0.796	8	0.796	10.4	500	1.6	120
JWIF1812-561□□	K	560	0.796	8	0.796	12.5	500	1.5	110
JWIF1812-681□□	K	680	0.796	8	0.796	14	500	1.5	100
JWIF1812-751□□	K	750	0.796	8	0.796	14.5	500	1.5	95
JWIF1812-821□□	K	820	0.796	8	0.796	15	500	1.5	95
JWIF1812-102□□	K	1000	0.252	6	0.252	16.5	500	1.4	90

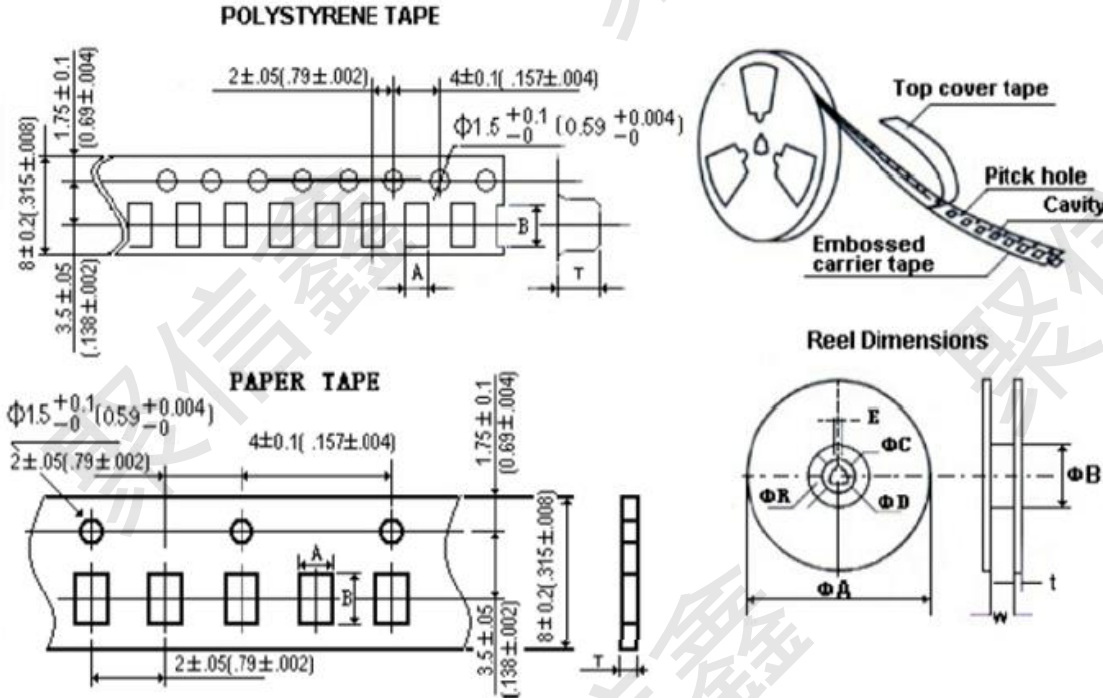
注: JWIF1812系列除1R0、2R2、3R3、3R9、4R7、5R6、100、150、220、270、330、390、470、560、820、101、121、271、471、561、681、821、102 外, 其余产品不印标。

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
	1812	3.22	4.82	3.15

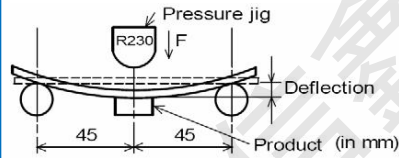
unit	ΦA	ΦB	ΦC	ΦD	E	W	t	R
mm	178	60	13	21	2	10	2	1
	330	75	13	23	2	12	2	1

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

规格	0402	0603	0805	1008	1210	1812
数量(pcs)	10000	4000	3000	2000	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: 100 Hours relative humidity: 90~95%
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 1 Hour and 45min Frequency range: 10~55~10Hz(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: 1000 Hours with rating current