

⊕ Feature

- Pair and triple wire coil for high stability and high balance.
- Available in tape & reel for automatic surface mounting.

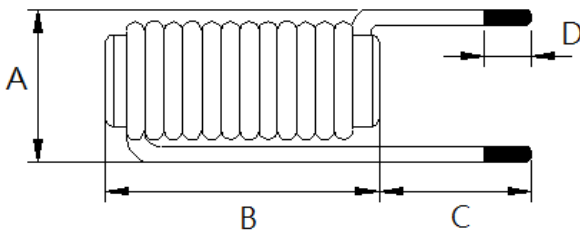
⊕ Product Identification:



Series name	Dimensions(ODXL)		Internal code
RC	6X30	6*30mm	A
			:
			M= Mn-Zn core
			S = Standard

Inductance		Tolerance		Material
1R0	1 μ H	K	10%	K25=2500ui
100	10 μ H	M	20%	K70=7000ui
101	100 μ H	N	30%	T12=12000ui
102	1000 μ H		Min	:

⊕ Shapes And Dimensions



Part No.	Dimensions(mm)			
	A	B	C	D
RC6x30MS-11TS	8.0	30.0	13.00	2.00
	± 2.0	± 1.0	Typ.	Typ.

⊕ Electrical Characteristics:

Part No.	Pin No	Turns (Ts)	Wire	L (μ H)	DCR	Hi-Pot (N1)
				1KHz/0.25V	(m Ω)	
RC6x30MS-11TS	N1	11.5	2UEW-0.6(本色)	5.6		AC - V, - mA, - Sec
				Typ.	Max.	

⊕ Equivalent Circuit Schematic:



⊕ Material List:

No.	Location	Material
1	Core	MK25 R6x30
2	Wire	N1 :2UEW-130, 金色
3	Solder	Sn99.3 Cu0.7

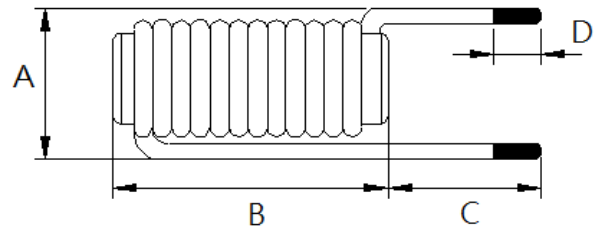
TEST DATA FOR PREPRODUCTION SAMPLES

Customer		Test Date	2016-5-23		
RSiN Part No.	RC6x30MS-11TS	Sample Quantity	10	PCS	
Lot No		Test Temp	25°C	Test Humidity	62%

MEAS Item	L(N1) (μH)	DCR(N1) (mΩ)		A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	G (mm)		
SPEC	5.6	0		8.00	30.00	13.00	2.00	-	-	-	-
Upper	-	0.00	-	10.00	31.00	-	-	-	-	-	-
Lower	-	-	-	6.00	29.00	-	-	-	-	-	-
Tolerance	Typ	Max		2.00	1.00	Typ	Typ	-	-	-	-
Test Freq.	1KHz/0.25V									-	-
1	5.60			8.74	29.70	13.10	2.00				
2	5.60			8.86	29.72	13.12	2.00				
3	5.62			8.78	29.70	13.08	2.00				
4	5.55			8.82	29.74	13.06	2.00				
5	5.62			8.78	29.70	13.08	2.00				
6											
7											
8											
9											
10											
Average	5.60			8.80	29.71	13.09	2.00				
Max	5.62	0.00		8.86	29.74	13.12	2.00	0.00	0.00	0.00	0.00
Min	5.55	0.00		8.74	29.70	13.06	2.00	0.00	0.00	0.00	0.00
Range	0.07	0.00		0.12	0.04	0.06	0.00	0.00	0.00	0.00	0.00
StDevP	0.03	#DIV/0!		0.04	0.02	0.02	0.00	#####	#####	#####	#####

Test Instrument

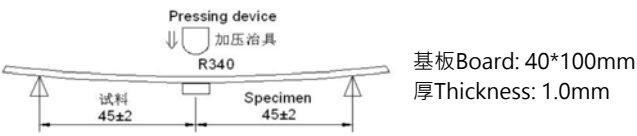
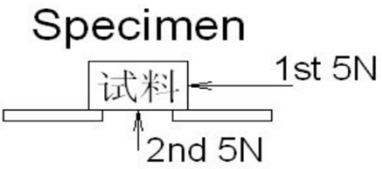
LCR CHROMA 3302A
DCR TH283TLX+TH1901A



Coil Spec : 2UEW-0.6mm*11Ts

Drawn by *davy* Checked by *amanda* Approved by *Vincent*

⊕ General Characteristics

項目 Item	Conditions	Specification
温度特性 Temperature drift	在温度-25 ~ + 85°C之间测试。 To be measured in the range of -25°C to 85°C.	Inductance temperature coefficient 2000 ppm/°C or less
保存温度范围 Storage Temperature	在包装的状态下。 With taping.	- 25°C ~ + 85°C
使用温度范围 Operating Temperature	包括制品的发热温度。 Including self temperature rise.	- 25°C ~ + 85°C
弯曲测试 Bending test	<p>试件焊接在基板上，按箭头方向以大约0.5mm/秒的速度加压，直到基板变形幅度到3mm 保持30秒。</p> <p>Apply pressure gradually in the direction of the arrow at a rate of about 0.5mm/s until bent depth reaches 3mm and hold for 30±5s.</p> 	Change from an initial value L : within±10%
固着强度 Adhesion strength	<p>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。</p> <p>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±5s. Measure after removing pressure.</p> 	Change from an initial value L : within±10%

<p>耐振性 Vibration</p>	<p>振动频率10~55~10Hz, 振幅1.5mm, 分X,Y,Z方向各振动1小时(共3小时)。</p> <p>The specimen shall be subjected to a vibration of 1.5mm amplitude, sweep frequency 10~55Hz (10Hz to 55Hz to 10Hz in a period of one minute) for 1 h in each of 3(X,Y,Z) axes.</p>	<p>Change from an initial value L: within±10%</p>
<p>耐冲击性 Mechanical shock</p>	<p>利用橡胶块式落下冲击试验机, 分别在3个互相垂直的方向以981m/S²的冲击加速度落下。</p> <p>Peak acceleration: 981 m/S² Duration of pulse: 6ms 3 times in each of 3(X,Y,Z)axes. The specimen must be fixed on test board. Three successive shock shall be applied in the perpendicular direction of each surface of the specimen.</p>	<p>Change from an initial value L: within±10%</p>
<p>自然落下试验 Free fall test</p>	<p>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。</p> <p>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.</p>	<p>Change from an initial value L: within±10%</p>
<p>焊锡附着性 Solder ability</p>	<p>试验品的电极深布松香后, 在5~10秒内焊锡, 焊锡槽温度245±5℃, 时间: 3±0.5秒。</p> <p>Terminals shall be immersed for 5 to 10 seconds in flux at room temperature. Dip sample into solder bath containing molten solder at 245±5℃ for 3±0.5 seconds.</p>	<p>90%以上的面积要被覆盖。 New solder shall cover 90% minimum of the surface immersed.</p>
<p>耐电压 Dielectric strength</p>	<p>在电极与磁材之间加入直流电压100V 通电时间1分钟。</p> <p>100V DC shall be applied for 60s between the terminal and the core.</p>	<p>没有损害。 Without damage.</p>

<p>焊锡耐热性 Resistance to soldering heat</p>	<p>试验方法Test method 热风炉焊接Reflow soldering method 预热Preheat 150~180°C 90±30s 峰值温度Peak temp 250(+ 5,-0)°C (230°Cmin, 30±10s) 试验板的厚度0.8mm 上按上面条件通过两次热风炉。 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. 测定Measurement 常温常湿中放置于1 小时以上测试。 The specimen shall be stored at standard atmospheric conditions for 1 h in prior to the measurement.</p>	<p>Change from an initial value L : within±10%</p>
<p>绝缘抵抗 Insulation resistance</p>	<p>在电极与磁材之间加入直流电压100V。 100V DC shall be applied between the terminal and the core.</p>	<p>100mΩ 以上 100mΩ or more.</p>
<p>耐寒性 Low temperature</p>	<p>在温度-40±3°C中放置500±12 小时后，常温常湿中放置1 小时以上2 小时以内测试。 The specimen shall be stored at a temperature of -40±3°C for 500 ±12h. Then it shall be stabilized under standard atmospheric conditions for 1 h before measurement Measurement shall be made within 1h.</p>	<p>Change from an initial value L : within±10%</p>
<p>耐热性 Dry heat</p>	<p>在温度85±2°C中放置500±12 小时后，常温常湿中放置1 小时以上2 小时以内测试。 The specimen shall be stored at a temperature of 85 ± 2°C for 500± 12h. Then it shall be stabilized under standard atmospheric conditions for 1 h before measurement. Measurement shall be made within 1h.</p>	<p>Change from an initial value L : within±10%</p>

<p>耐湿性 Dump heat</p>	<p>在温度$60\pm 2^{\circ}\text{C}$·湿度90~95%中放置500 ± 12小时后·常温常湿中放置1小时以上2小时以内测试。 The specimen shall be stored at a temperature of $60\pm 2^{\circ}\text{C}$ with relative humidity of 90 ~ 95% for $500 \pm 2\text{h}$. Then it shall be stabilized under standard atmospheric conditions for 1 h before measurement. Measurement shall be made within 1h.</p>	<p>Change from an initial value L : within$\pm 10\%$</p>
<p>温度循环 Temperature cycle</p>	<p>以温度-40°C中放置30分钟·在85°C放置30分钟·中间转换时间不超过2分钟为一个循环。完成500个循环后·常温常湿中放置1小时以上2小时以内测试。 The specimen shall be subjected to 500 continuous cycles of temperature change of -40°C for 30 min and 85°C for 30 min with the transit period of 2min or less. Then it shall be stabilized under standard atmospheric conditions for 1 h before measurement. Measurement shall be made within 1h.</p>	<p>Change from an initial value L : within$\pm 10\%$</p>

标准状态Standard atmospheric conditions

Unless otherwise specified, the standard range of atmospheric conditions in making measurements and test as follows;

Ambient temperature : 5°C to 35°C , Relative humidity: 45% to 85%, Air pressure: 86kPa to 106kPa

If more strict measurement is required, measurement shall be made within following limits;

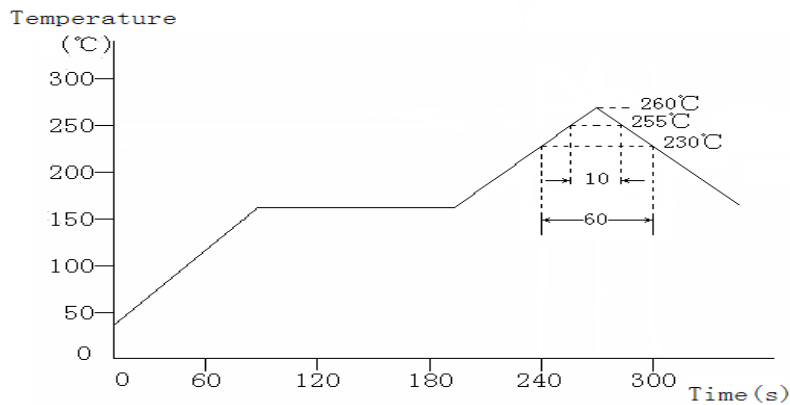
Ambient temperature : $20\pm 2^{\circ}\text{C}$, Relative humidity: $65\pm 5\%$, Air pressure: 86kPa to 106kPa

禁用物质Prohibited Substances

我公司保证我司的产品和生产过程符合“RoHS 规则”，所有产品中使用的材料均是化学物质生产规则中登记的材料。

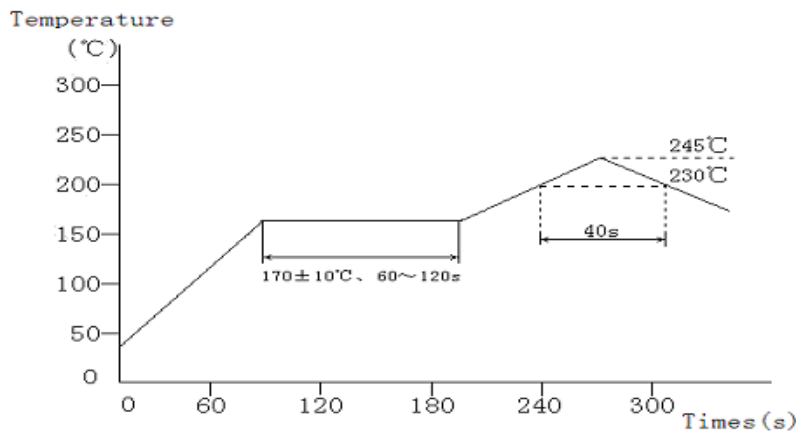
We confirm that our products and our production process accord with "rule of RoHS". All materials used in this product are registered material under the law concerning the examination and Regulation of Manufacture of Chemical Substances.

⊕ Reflow Soldering Heat Endurance



- No mechanical and electrical defects are found after testing based on the above profile and keeping under the conditions of room temperature and humidity for 2 hours.
- Twice reflow test is acceptable with the test interval remaining 1 hour under the normal conditions.
- The reflow test profile may vary with the testing instruments.

⊕ Recommended Reflow Conditions



The recommended reflow profile is based on the testing instruments used. Solder ability will depend on the testing equipments, reflow conditions, testing method, etc. So it is necessary to make a confirmation of them when the reflow conditions are set up.