

## 承认书

## SPECIFICATION FOR APPROVAL

客户名称:

Customer Name: \_\_\_\_\_

(请填写贵司全名)

客户品名:

Customer Part No.: \_\_\_\_\_

(请填写客户物料编码)

大立品名:

DALI Part No.: \_\_\_\_\_

(请填写大立品名)

大立规格书编号:

Specification No.: \_\_\_\_\_

Spec-CDRH-R Series Rev.02

变更履历/Revised record:

Rev.	Effective Date	Changed Contents	Change Reasons	Approved By
01	2012-09-01	New released		Paul
02	2019-01-01	Format update		Paul

客户承认栏(请签名盖章并签署日期后回传)

Customer's Approval Chop:

客户承认盖章:


Approved By:

承认人:

Approved Date:

承认日期:

广州大立电子有限公司

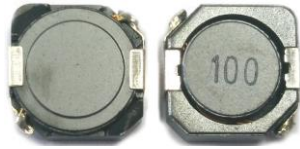
Confirmed	Checked	Prepared
 Paul	Amy	Steven
Date: 2019-01-01		

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Tel: 020-39075998 Fax: 020-39075978

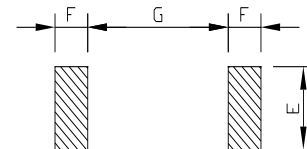
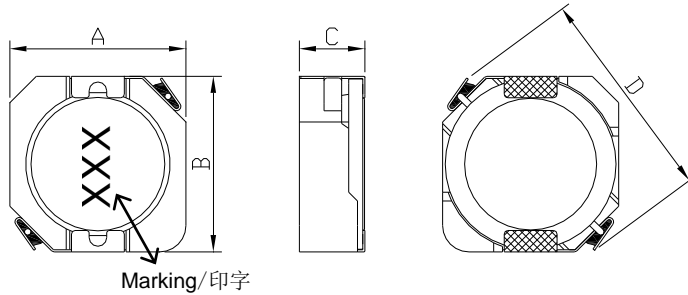
## Type Name: CDRH-R Series

## Construction/磁气构造图



## Dimensions/外形尺寸图(Unit: mm)

## Land patterns/贴装尺寸



## Shape and Size: (Dimensions are in mm)

Type Name/型号	A	B	C	D	E	F	G	MPQ(Pcs/Reel) 最小包装数(个/盘)
CDRH103R	10.0±0.3	10.2±0.3	2.8±0.3	13.5MAX	3.2REF	1.6REF	7.3REF	1000
CDRH104R	10.0±0.3	10.2±0.3	3.8±0.3	13.5MAX	3.2REF	1.6REF	7.3REF	1000
CDRH1045R	10.0±0.5	10.3±0.5	4.3±0.3	13.5MAX	3.4REF	1.8REF	7.5REF	800
CDRH105R	10.0±0.3	10.2±0.3	4.8±0.3	13.5MAX	3.2REF	1.6REF	7.3REF	800

## Product Identification/品名注释

**C D R H 104 R - 100 M C**  
 (1) (2) (3) (4) (5) (6) (7) (8) (9)

(1) SMD/表面安装制品

(2) Drum Core Used/使用工字型磁芯

(3) Ring Core Used/使用环形磁芯

(4) HOOP Used/使用金属导片基座

(5) Dimension symbol/尺寸表示:

104=10 x 4 mm (W x H)

(6) Diagonally HOOP/对角金属导片

(7) Inductance value/电感值:

4R7=4.7μH, 100=10μH, 101=100μH

(8) Tolerance/公差: M=±20%, P=±25%, N=±30%

(9) Packing Style/包装形态: C=Carrier taping/编带包装

## Specifications/规格

Type Name: CDRH103R				
Part No./品名	Inductance/电感值( $\mu$ H)	Test Condition/ 测试条件	D.C.R./直流电阻 ( $m\Omega$ )MAX.	Saturation Current/ 饱和电流(A) ※
CDRH103R-0R8NC	0.8 $\pm$ 30%	100KHz,0.25V	15	10.0
CDRH103R-1R5NC	1.5 $\pm$ 30%	100KHz,0.25V	20	8.00
CDRH103R-2R2NC	2.2 $\pm$ 30%	100KHz,0.25V	25	6.50
CDRH103R-3R3NC	3.3 $\pm$ 30%	100KHz,0.25V	30	5.50
CDRH103R-4R7NC	4.7 $\pm$ 30%	100KHz,0.25V	35	4.50
CDRH103R-6R8NC	6.8 $\pm$ 30%	100KHz,0.25V	45	3.80
CDRH103R-8R2NC	8.2 $\pm$ 30%	100KHz,0.25V	55	3.50
CDRH103R-100MC	10 $\pm$ 20%	100KHz,0.25V	65	3.10
CDRH103R-150MC	15 $\pm$ 20%	100KHz,0.25V	110	2.00
CDRH103R-220MC	22 $\pm$ 20%	100KHz,0.25V	145	2.10
CDRH103R-330MC	33 $\pm$ 20%	100KHz,0.25V	200	1.70
CDRH103R-470MC	47 $\pm$ 20%	100KHz,0.25V	300	1.40
CDRH103R-560MC	56 $\pm$ 20%	100KHz,0.25V	350	1.30
CDRH103R-680MC	68 $\pm$ 20%	100KHz,0.25V	450	1.20
CDRH103R-820MC	82 $\pm$ 20%	100KHz,0.25V	550	1.10
CDRH103R-101MC	100 $\pm$ 20%	100KHz,0.25V	700	1.00
CDRH103R-121MC	120 $\pm$ 20%	100KHz,0.25V	800	0.85
CDRH103R-151MC	150 $\pm$ 20%	100KHz,0.25V	1000	0.80

※ The saturation current is the DC current when the inductance decreases to 65% of initial value. (Ta=25°C)

Type Name: CDRH104R				
Part No./品名	Inductance/电感值( $\mu$ H)	Test Condition/ 测试条件	D.C.R./直流电阻 ( $m\Omega$ )MAX.	Saturation Current/ 饱和电流(A) ※
CDRH104R-1R5NC	1.5 $\pm$ 30%	100KHz,0.25V	12	9.00
CDRH104R-2R2NC	2.2 $\pm$ 30%	100KHz,0.25V	15	7.50
CDRH104R-3R9NC	3.9 $\pm$ 30%	100KHz,0.25V	25	6.00
CDRH104R-5R6NC	5.6 $\pm$ 30%	100KHz,0.25V	30	5.50
CDRH104R-6R8NC	6.8 $\pm$ 30%	100KHz,0.25V	35	4.80
CDRH104R-100MC	10 $\pm$ 20%	100KHz,0.25V	42	4.40
CDRH104R-120MC	12 $\pm$ 20%	100KHz,0.25V	50	3.70
CDRH104R-150MC	15 $\pm$ 20%	100KHz,0.25V	55	3.30
CDRH104R-180MC	18 $\pm$ 20%	100KHz,0.25V	75	3.00
CDRH104R-220MC	22 $\pm$ 20%	100KHz,0.25V	95	2.80
CDRH104R-270MC	27 $\pm$ 20%	100KHz,0.25V	110	2.50
CDRH104R-330MC	33 $\pm$ 20%	100KHz,0.25V	125	2.30
CDRH104R-390MC	39 $\pm$ 20%	100KHz,0.25V	135	2.00
CDRH104R-470MC	47 $\pm$ 20%	100KHz,0.25V	155	1.80
CDRH104R-560MC	56 $\pm$ 20%	100KHz,0.25V	200	1.65
CDRH104R-680MC	68 $\pm$ 20%	100KHz,0.25V	240	1.50
CDRH104R-820MC	82 $\pm$ 20%	100KHz,0.25V	280	1.40
CDRH104R-101MC	100 $\pm$ 20%	100KHz,0.25V	350	1.30
CDRH104R-121MC	120 $\pm$ 20%	100KHz,0.25V	430	1.20
CDRH104R-151MC	150 $\pm$ 20%	100KHz,0.25V	505	1.10

CDRH104R-181MC	180±20%	100KHz,0.25V	565	1.00
CDRH104R-221MC	220±20%	100KHz,0.25V	755	0.90
CDRH104R-271MC	270±20%	100KHz,0.25V	850	0.80
CDRH104R-331MC	330±20%	100KHz,0.25V	1200	0.70
CDRH104R-102MC	1000±20%	100KHz,0.25V	3000	0.20

※ The saturation current is the DC current when the inductance decreases to 65% of initial value. (Ta=25°C)

#### Type Name: CDRH1045R

Part No./品名	Inductance/电感值(μH)	Test Condition/ 测试条件	D.C.R./直流电阻 (mΩ)MAX.	Saturation Current/ 饱和电流(A) ※
CDRH1045R-1R2NC	1.2±30%	100KHz,0.25V	15	7.0
CDRH1045R-1R8NC	1.8±30%	100KHz,0.25V	20	6.5
CDRH1045R-2R7NC	2.7±30%	100KHz,0.25V	25	6.0
CDRH1045R-3R9NC	3.9±30%	100KHz,0.25V	28	5.5
CDRH1045R-5R6NC	5.6±30%	100KHz,0.25V	32	4.5
CDRH1045R-6R8NC	6.8±30%	100KHz,0.25V	35	4.2
CDRH1045R-8R2NC	8.2±30%	100KHz,0.25V	40	4.0
CDRH1045R-100MC	10±20%	100KHz,0.25V	45	3.6
CDRH1045R-120MC	12±20%	100KHz,0.25V	55	3.0
CDRH1045R-150MC	15±20%	100KHz,0.25V	65	2.8
CDRH1045R-220MC	22±20%	100KHz,0.25V	90	2.5
CDRH1045R-330MC	33±20%	100KHz,0.25V	120	1.8
CDRH1045R-470MC	47±20%	100KHz,0.25V	160	1.5
CDRH1045R-560MC	56±20%	100KHz,0.25V	175	1.4
CDRH1045R-680MC	68±20%	100KHz,0.25V	220	1.3
CDRH1045R-820MC	82±20%	100KHz,0.25V	280	1.1
CDRH1045R-101MC	100±20%	100KHz,0.25V	350	1.0

※ The saturation current is the DC current when the inductance decreases to 65% of initial value. (Ta=25°C)

#### Type Name: CDRH105R

Part No./品名	Inductance/电感值(μH)	Test Condition/ 测试条件	D.C.R./直流电阻 (mΩ)MAX.	Saturation Current/ 饱和电流(A) ※
CDRH105R-1R8NC	1.8±30%	100KHz,0.25V	14	10.0
CDRH105R-2R7NC	2.7±30%	100KHz,0.25V	16	8.00
CDRH105R-3R3NC	3.3±30%	100KHz,0.25V	18	7.50
CDRH105R-4R7NC	4.7±30%	100KHz,0.25V	20	6.00
CDRH105R-5R6NC	5.6±30%	100KHz,0.25V	22	5.50
CDRH105R-6R8NC	6.8±30%	100KHz,0.25V	25	5.00
CDRH105R-8R2NC	8.2±30%	100KHz,0.25V	28	4.50
CDRH105R-100MC	10±20%	100KHz,0.25V	35	4.20
CDRH105R-120MC	12±20%	100KHz,0.25V	45	3.80
CDRH105R-150MC	15±20%	100KHz,0.25V	50	3.50
CDRH105R-180MC	18±20%	100KHz,0.25V	55	3.00
CDRH105R-220MC	22±20%	100KHz,0.25V	61	2.70
CDRH105R-270MC	27±20%	100KHz,0.25V	80	2.40
CDRH105R-330MC	33±20%	100KHz,0.25V	95	2.20
CDRH105R-390MC	39±20%	100KHz,0.25V	105	2.10

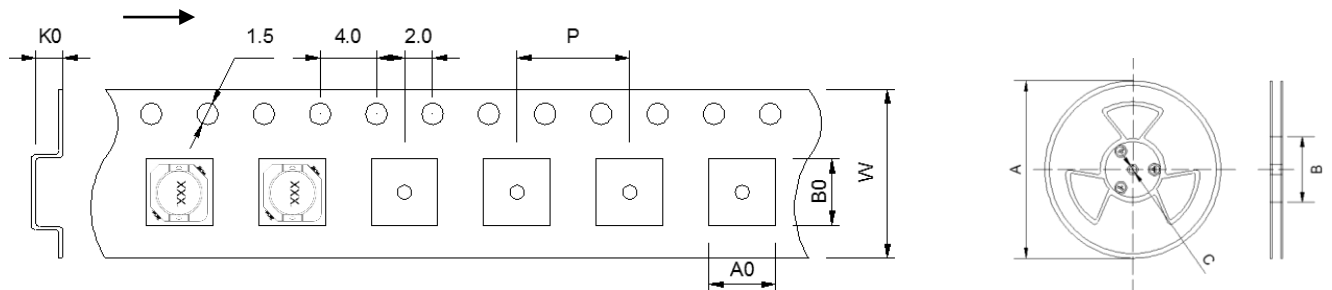
CDRH105R-470MC	47±20%	100KHz,0.25V	130	2.00
CDRH105R-560MC	56±20%	100KHz,0.25V	160	1.80
CDRH105R-680MC	68±20%	100KHz,0.25V	200	1.65
CDRH105R-820MC	82±20%	100KHz,0.25V	227	1.50
CDRH105R-101MC	100±20%	100KHz,0.25V	250	1.35
CDRH105R-121MC	120±20%	100KHz,0.25V	300	1.18
CDRH105R-151MC	150±20%	100KHz,0.25V	370	1.05
CDRH105R-181MC	180±20%	100KHz,0.25V	418	0.92
CDRH105R-221MC	220±20%	100KHz,0.25V	500	0.85
CDRH105R-271MC	270±20%	100KHz,0.25V	670	0.72
CDRH105R-331MC	330±20%	100KHz,0.25V	810	0.65
CDRH105R-391MC	390±20%	100KHz,0.25V	950	0.60
CDRH105R-471MC	470±20%	100KHz,0.25V	1280	0.55
CDRH105R-561MC	560±20%	100KHz,0.25V	1550	0.52
CDRH105R-681MC	680±20%	100KHz,0.25V	1700	0.48
CDRH105R-821MC	820±20%	100KHz,0.25V	2200	0.45
CDRH105R-102MC	1000±20%	100KHz,0.25V	2500	0.42
CDRH105R-122MC	1200±20%	100KHz,0.25V	3000	0.40
CDRH105R-152MC	1500±20%	100KHz,0.25V	3500	0.38
CDRH105R-182MC	1800±20%	100KHz,0.25V	4000	0.35
CDRH105R-202MC	2000±20%	100KHz,0.25V	4500	0.30

※ The saturation current is the DC current when the inductance decreases to 65% of initial value. (Ta=25°C)

Note: All test data is referenced to 25°C ambient.

### Packing: Dimensions for embossed tape & reel with packing quantity /包装尺寸及数量

The force to tear off cover tape is 0.1-1.3N in the arrow direction.



Type	Tape Dimensions(mm)					Reel Dimensions(mm)			MPQ(Pcs/Reel) 最小包装数(个/盘)
	W	P	A0	B0	K0	A	B	C	
CDRH103R	24	16	10.7	10.7	3.1	330	100	13	1000
CDRH104R	24	16	10.5	10.6	4.3	330	100	13	1000
CDRH1045R	24	16	10.5	10.6	4.7	330	100	13	800
CDRH105R	24	16	10.7	10.7	5.3	330	100	13	800

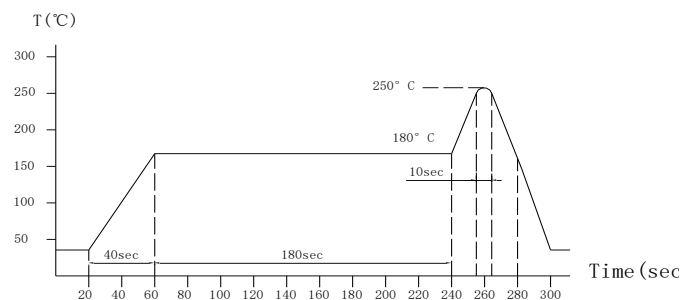
Dimensions without tolerance are reference. /无公差尺寸为参考尺寸。

## General Characteristics/一般特性

Operation Temperature Range /使用温度范围	-40~+105°C(Includes temperature when the coil is heated) / -40~+105°C(包含线圈自身发热)
Storage Conditions /保存条件(产品安装基板前)	To maintain the solderability of terminal electrodes: / 为了保持电极的可焊性, 请按以下保存条件存储: 1. Temperature and humidity conditions: 5~40°C and 30~70% RH; / 温度、湿度条件: 5~40°C、相对湿度 30~70%; 2. Recommended products should be used within 6 months form the time of delivery; / 产品应在交货后 6 个月内使用; 3. The products Should be stored in the complete package provided by the supplier; The packaging material should be kept where no chlorine or sulfur exists in the air; The packaging should be placed on the shelf. / 产品须存储在供方提供的完整的包装内; 产品包装应存放在空气中不含氯或硫的地方; 产品包装应放在货架上。
Transport Attentions /搬运注意事项	1. Products should be handled with care to avoid damage or contamination from perspiration and skin oils; / 1. 产品搬运时应小心处理, 避免因出汗和皮肤油渍而造成损坏或污染; 2. The use of tweezers or vacuum pick up is strongly recommended for individual components; / 2. 强烈建议对单个部件使用镊子或真空吸嘴; 3. Bulk handling should ensure that abrasion and mechanical shock are minimized. / 3. 散货搬运应确保磨损和机械冲击最小化。
External Appearance/外观	On visual inspection, the coil has no external defects. / 目视检查时, 外观没有明显的缺陷。
Solderability Test/可焊性测试	The terminal shall be at least 90% covered with solder. Test condition: after fluxing, inductor shall be dipped in a melted solder bath at 245 ± 5°C for 5 Sec. / 电极应至少覆盖 90% 的焊料。测试条件: 电极涂上助焊剂后在 245±5°C 的熔化焊槽中浸泡 5 秒。
Humidity Characteristics /耐湿度特性	Inductance deviation within ±10%, after 96 hours in 90~95% relative humidity at 40±2°C and 1 hour drying under normal condition. / 温度在 40±2°C, 相对湿度在 90~95% 条件下存放 96 小时后取出, 用布擦干, 然后在常温常湿中放置 1 小时, 电感值变化率±10%以内。
Thermal shock test /冷热冲击特性	Inductance deviation within ±10%, after 20 cycles of -40°C for 30 minutes, +105°C for 30 minutes. Characteristics are measured after the ambient air exposure of 1 hour. / -40°C 放置 30 分钟后转换为+105°C 放置 30 分钟, 20 次循环, 然后在常温常湿中放置 1 小时, 电感值变化率±10%以内。
High temperature storage test /高温保存测试	Inductance deviation within ±10%, after 96 hours in +105°C±2°C characteristics are measured after ambient are exposure of 1 hour. / +105°C±2°C 放置 96 小时, 然后在常温常湿中放置 1 小时, 电感值变化率±10%以内。
Low temperature storage test /低温保存测试	Inductance deviation within ±10%, after 96 hours in -40°C±2°C characteristics are measured after ambient are exposure of 1 hour. / -40°C±2°C 放置 96 小时, 然后在常温常湿中放置 1 小时, 电感值变化率±10%以内。

## Recommended Reflow Conditions (Lead-free)

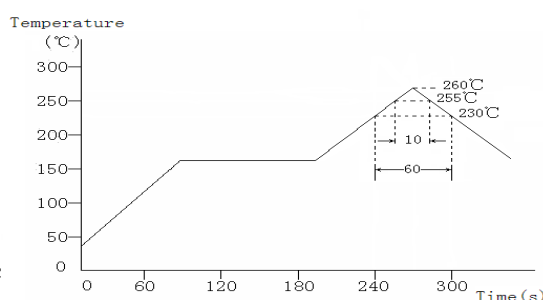
## /推荐回流焊条件(无铅)



The reflow condition recommended above is according to the machine used by our company. Big differences will arise as a result of the type of machine, reflow conditions, method, used etc. Hence, before setting up your reflow conditions, please confirm with the above. / 上面推荐的回流焊试验条件是根据本公司的回流焊设备测试结果得到。不同的试验设备、试验条件和试验方法及试验结果不同, 因此回流焊试验条件的设定需要仔细地确认。

## Reflow Soldering Heat Endurance

## /回流焊耐热



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. / 在该条件下进行回流焊, 常温常湿条件下放置 2 个小时后, 无机械、电气特性缺陷发生。

Twice reflow test is acceptable with the test interval remaining 1 hour under the normal conditions. / 在常温常湿条件下, 间隔 1 小时可进行两次回流焊。The reflow test profile may vary with the testing instruments. / 回流焊曲线图会因设备的不同有所差异。