

## 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-M 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

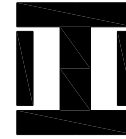
Confirmed	Checked	Prepared
 Paul	Amy	Steven
Date: 2019-01-01		

Add: 广州市南沙区进港大道

Tel: 020-39075998 Fax: 020-39075978

Type Name: CDRH-M Series

Construction/磁气构造图



Dimensions/外形尺寸图(Unit: mm)

Land patterns/贴装尺寸

Fig.1 (CDRH73M, CDRH74M)

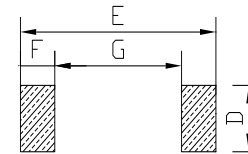
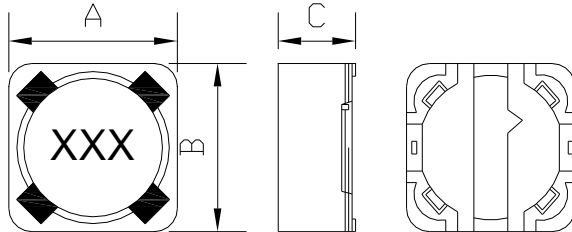
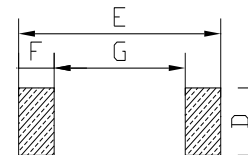
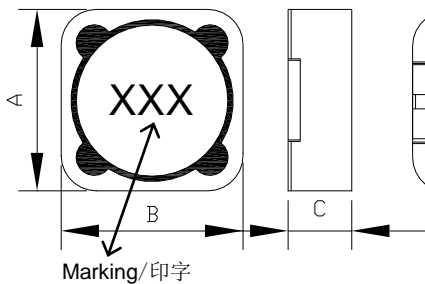


Fig.2 (CDRHCDRH125M, CDRH127M, CDRH129M)



Shape and Size: (Dimensions are in mm)

Type Name/型名	Shape	A	B	C	D	E	F	G	MPQ(Pcs/Reel) 最小包装数(个/盘)
CDRH73M	Fig.1	7.3±0.2	7.3±0.2	3.5MAX	2.2REF	8.0REF	1.6REF	4.8REF	1000
CDRH74M	Fig.1	7.3±0.2	7.3±0.2	4.5MAX	2.2REF	8.0REF	1.6REF	4.8REF	1000
CDRH125M	Fig.2	12.5MAX	12.5MAX	6.0MAX	5.4REF	12.8REF	2.9REF	7.0REF	500
CDRH127M	Fig.2	12.5MAX	12.5MAX	8.0MAX	5.4REF	12.8REF	2.9REF	7.0REF	500
CDRH129M	Fig.2	12.5MAX	12.5MAX	10.0MAX	5.4REF	12.8REF	2.9REF	7.0REF	350

Product Identification/品名注释

C D R H 127 M - 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:

127=12 x 7 mm (W x H)

(6) Mn-zn core used/使用锰锌磁芯

(7) Inductance value/电感值:

4R7=4.7μH, 100=10μH, 101=100μH

(8) Tolerance/公差: M=±20%, N=±30%

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

## Specifications/规格

Type Name: CDRH73M				
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) ※
CDRH73M-6R8MC	6.8±20%	100KHz,0.25V	65	3.10
CDRH73M-100MC	10±20%	100KHz,0.25V	82	2.50
CDRH73M-220MC	22±20%	100KHz,0.25V	120	2.10
CDRH73M-330MC	33±20%	100KHz,0.25V	160	1.80
CDRH73M-470MC	47±20%	100KHz,0.25V	250	1.50
CDRH73M-560MC	56±20%	100KHz,0.25V	340	1.20
CDRH73M-680MC	68±20%	100KHz,0.25V	410	1.10
CDRH73M-820MC	82±20%	100KHz,0.25V	460	1.00
CDRH73M-101MC	100±20%	100KHz,0.25V	600	0.86
CDRH73M-221MC	220±20%	100KHz,0.25V	720	0.70
CDRH73M-331MC	330±20%	100KHz,0.25V	1500	0.60
CDRH73M-471MC	470±20%	100KHz,0.25V	2400	0.50
CDRH73M-561MC	560±20%	100KHz,0.25V	3500	0.40
CDRH73M-681MC	680±20%	100KHz,0.25V	4800	0.30
CDRH73M-821MC	820±20%	100KHz,0.25V	5500	0.25
CDRH73M-102MC	1000±20%	100KHz,0.25V	7500	0.20

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

Type Name: CDRH74M				
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) ※
CDRH74M-1R0NC	1.0±30%	100KHz,0.25V	18	9.0
CDRH74M-1R5NC	1.5±30%	100KHz,0.25V	20	8.0
CDRH74M-1R8NC	1.8±30%	100KHz,0.25V	25	7.7
CDRH74M-2R2NC	2.2±30%	100KHz,0.25V	30	7.0
CDRH74M-2R7NC	2.7±30%	100KHz,0.25V	35	6.5
CDRH74M-3R3NC	3.3±30%	100KHz,0.25V	40	6.0
CDRH74M-3R9NC	3.9±30%	100KHz,0.25V	42	5.5
CDRH74M-4R7NC	4.7±30%	100KHz,0.25V	45	5.0
CDRH74M-5R6NC	5.6±30%	100KHz,0.25V	55	4.2
CDRH74M-6R8NC	6.8±30%	100KHz,0.25V	65	3.8
CDRH74M-8R2NC	8.2±30%	100KHz,0.25V	75	3.5
CDRH74M-100MC	10±20%	100KHz,0.25V	90	2.8
CDRH74M-120MC	12±20%	100KHz,0.25V	100	2.6
CDRH74M-150MC	15±20%	100KHz,0.25V	110	2.4
CDRH74M-180MC	18±20%	100KHz,0.25V	130	2.2
CDRH74M-220MC	22±20%	100KHz,0.25V	140	2.1
CDRH74M-270MC	27±20%	100KHz,0.25V	150	2.0
CDRH74M-330MC	33±20%	100KHz,0.25V	200	1.8
CDRH74M-390MC	39±20%	100KHz,0.25V	250	1.6
CDRH74M-470MC	47±20%	100KHz,0.25V	320	1.5
CDRH74M-560MC	56±20%	100KHz,0.25V	350	1.4
CDRH74M-680MC	68±20%	100KHz,0.25V	450	1.3

CDRH74M-820MC	82±20%	100KHz,0.25V	520	1.1
CDRH74M-101MC	100±20%	100KHz,0.25V	680	1.0
CDRH74M-121MC	120±20%	100KHz,0.25V	800	0.9
CDRH74M-151MC	150±20%	100KHz,0.25V	1000	0.8
CDRH74M-181MC	180±20%	100KHz,0.25V	1150	0.75
CDRH74M-221MC	220±20%	100KHz,0.25V	1400	0.70
CDRH74M-271MC	270±20%	100KHz,0.25V	1700	0.65
CDRH74M-331MC	330±20%	100KHz,0.25V	2100	0.60
CDRH74M-391MC	390±20%	100KHz,0.25V	2750	0.52
CDRH74M-471MC	470±20%	100KHz,0.25V	3000	0.46
CDRH74M-561MC	560±20%	100KHz,0.25V	4000	0.42
CDRH74M-681MC	680±20%	100KHz,0.25V	4400	0.40
CDRH74M-821MC	820±20%	100KHz,0.25V	5300	0.35
CDRH74M-102MC	1000±20%	100KHz,0.25V	6600	0.30
CDRH74M-122MC	1200±20%	100KHz,0.25V	9500	0.25

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

#### Type Name: CDRH125M

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) ※
CDRH125M-1R0NC	1.0±30%	100KHz,0.25V	10	15
CDRH125M-1R5NC	1.5±30%	100KHz,0.25V	14	14
CDRH125M-2R2NC	2.2±30%	100KHz,0.25V	16	13
CDRH125M-3R3NC	3.3±30%	100KHz,0.25V	18	12
CDRH125M-4R7NC	4.7±30%	100KHz,0.25V	20	11
CDRH125M-5R6NC	5.6±30%	100KHz,0.25V	24	10
CDRH125M-6R8MC	6.8±20%	100KHz,0.25V	26	9.0
CDRH125M-8R2MC	8.2±20%	100KHz,0.25V	28	8.0
CDRH125M-100MC	10±20%	100KHz,0.25V	30	7.0
CDRH125M-120MC	12±20%	100KHz,0.25V	35	6.5
CDRH125M-150MC	15±20%	100KHz,0.25V	42	6.0
CDRH125M-180MC	18±20%	100KHz,0.25V	48	5.5
CDRH125M-220MC	22±20%	100KHz,0.25V	55	5.0
CDRH125M-270MC	27±20%	100KHz,0.25V	65	4.5
CDRH125M-330MC	33±20%	100KHz,0.25V	75	4.0
CDRH125M-390MC	39±20%	100KHz,0.25V	85	3.5
CDRH125M-470MC	47±20%	100KHz,0.25V	100	3.3
CDRH125M-560MC	56±20%	100KHz,0.25V	120	3.0
CDRH125M-680MC	68±20%	100KHz,0.25V	140	2.8
CDRH125M-820MC	82±20%	100KHz,0.25V	170	2.5
CDRH125M-101MC	100±20%	100KHz,0.25V	220	2.3
CDRH125M-121MC	120±20%	100KHz,0.25V	250	2.1
CDRH125M-151MC	150±20%	100KHz,0.25V	330	1.9
CDRH125M-181MC	180±20%	100KHz,0.25V	360	1.7
CDRH125M-221MC	220±20%	100KHz,0.25V	480	1.5
CDRH125M-271MC	270±20%	100KHz,0.25V	550	1.4
CDRH125M-331MC	330±20%	100KHz,0.25V	700	1.3

CDRH125M-391MC	390±20%	100KHz,0.25V	800	1.2
CDRH125M-471MC	470±20%	100KHz,0.25V	980	1.1
CDRH125M-561MC	560±20%	100KHz,0.25V	1200	1.0
CDRH125M-681MC	680±20%	100KHz,0.25V	1400	0.9
CDRH125M-821MC	820±20%	100KHz,0.25V	1700	0.8
CDRH125M-102MC	1000±20%	100KHz,0.25V	2100	0.7

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

#### Type Name: CDRH127M

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) ※
CDRH127M-1R0NC	1.0±30%	100KHz,0.25V	9.0	20
CDRH127M-1R5NC	1.5±30%	100KHz,0.25V	10	18
CDRH127M-2R2NC	2.2±30%	100KHz,0.25V	13	17
CDRH127M-3R3NC	3.3±30%	100KHz,0.25V	15	16
CDRH127M-4R7NC	4.7±30%	100KHz,0.25V	18	15
CDRH127M-5R6NC	5.6±30%	100KHz,0.25V	22	14
CDRH127M-6R8NC	6.8±30%	100KHz,0.25V	24	13
CDRH127M-8R2NC	8.2±30%	100KHz,0.25V	26	11
CDRH127M-100MC	10±20%	100KHz,0.25V	28	10
CDRH127M-120MC	12±20%	100KHz,0.25V	30	9.5
CDRH127M-150MC	15±20%	100KHz,0.25V	40	8.6
CDRH127M-180MC	18±20%	100KHz,0.25V	45	7.8
CDRH127M-220MC	22±20%	100KHz,0.25V	52	7.0
CDRH127M-270MC	27±20%	100KHz,0.25V	62	6.4
CDRH127M-330MC	33±20%	100KHz,0.25V	72	5.5
CDRH127M-390MC	39±20%	100KHz,0.25V	85	5.3
CDRH127M-470MC	47±20%	100KHz,0.25V	95	5.0
CDRH127M-560MC	56±20%	100KHz,0.25V	118	4.5
CDRH127M-680MC	68±20%	100KHz,0.25V	135	4.0
CDRH127M-820MC	82±20%	100KHz,0.25V	165	3.6
CDRH127M-101MC	100±20%	100KHz,0.25V	200	3.2
CDRH127M-121MC	120±20%	100KHz,0.25V	230	3.0
CDRH127M-151MC	150±20%	100KHz,0.25V	300	2.9
CDRH127M-181MC	180±20%	100KHz,0.25V	355	2.5
CDRH127M-221MC	220±20%	100KHz,0.25V	460	2.3
CDRH127M-271MC	270±20%	100KHz,0.25V	530	2.0
CDRH127M-331MC	330±20%	100KHz,0.25V	650	1.9
CDRH127M-391MC	390±20%	100KHz,0.25V	750	1.7
CDRH127M-471MC	470±20%	100KHz,0.25V	900	1.6
CDRH127M-561MC	560±20%	100KHz,0.25V	1100	1.5
CDRH127M-681MC	680±20%	100KHz,0.25V	1300	1.3
CDRH127M-821MC	820±20%	100KHz,0.25V	1650	1.2
CDRH127M-102MC	1000±20%	100KHz,0.25V	2000	1.1

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

## Type Name: CDRH129M

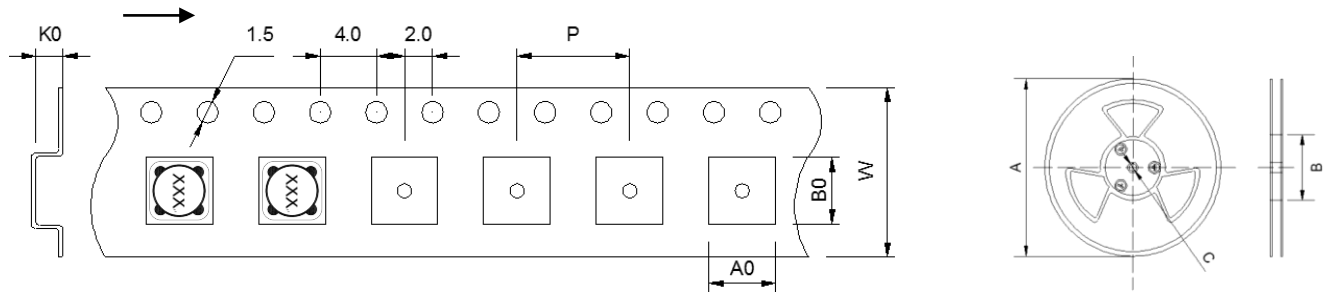
Part No./品名	Inductance/电感值( $\mu$ H)	Test Condition/ 测试条件	D.C.R./直流电阻 ( $m\Omega$ )MAX.	Saturation Current/ 饱和电流(A) ※
CDRH129M-1R0NC	1.0 $\pm$ 30%	100KHz,0.25V	8.0	25
CDRH129M-1R8NC	1.8 $\pm$ 30%	100KHz,0.25V	10	22
CDRH129M-2R2NC	2.2 $\pm$ 30%	100KHz,0.25V	12	19
CDRH129M-3R3NC	3.3 $\pm$ 30%	100KHz,0.25V	14	16
CDRH129M-4R7NC	4.7 $\pm$ 30%	100KHz,0.25V	16	14
CDRH129M-5R6NC	5.6 $\pm$ 30%	100KHz,0.25V	18	13
CDRH129M-6R8NC	6.8 $\pm$ 30%	100KHz,0.25V	19	12
CDRH129M-8R2NC	8.2 $\pm$ 30%	100KHz,0.25V	20	11
CDRH129M-100MC	10 $\pm$ 20%	100KHz,0.25V	22	9.5
CDRH129M-120MC	12 $\pm$ 20%	100KHz,0.25V	28	8.5
CDRH129M-150MC	15 $\pm$ 20%	100KHz,0.25V	35	8.0
CDRH129M-180MC	18 $\pm$ 20%	100KHz,0.25V	42	7.5
CDRH129M-220MC	22 $\pm$ 20%	100KHz,0.25V	50	7.0
CDRH129M-270MC	27 $\pm$ 20%	100KHz,0.25V	60	6.5
CDRH129M-330MC	33 $\pm$ 20%	100KHz,0.25V	70	5.8
CDRH129M-390MC	39 $\pm$ 20%	100KHz,0.25V	82	5.5
CDRH129M-470MC	47 $\pm$ 20%	100KHz,0.25V	88	5.0
CDRH129M-560MC	56 $\pm$ 20%	100KHz,0.25V	92	4.1
CDRH129M-680MC	68 $\pm$ 20%	100KHz,0.25V	120	3.8
CDRH129M-820MC	82 $\pm$ 20%	100KHz,0.25V	150	3.3
CDRH129M-101MC	100 $\pm$ 20%	100KHz,0.25V	185	3.0
CDRH129M-121MC	120 $\pm$ 20%	100KHz,0.25V	220	2.7
CDRH129M-151MC	150 $\pm$ 20%	100KHz,0.25V	270	2.5
CDRH129M-181MC	180 $\pm$ 20%	100KHz,0.25V	300	2.3
CDRH129M-221MC	220 $\pm$ 20%	100KHz,0.25V	320	2.1
CDRH129M-271MC	270 $\pm$ 20%	100KHz,0.25V	335	2.0
CDRH129M-331MC	330 $\pm$ 20%	100KHz,0.25V	350	1.8
CDRH129M-391MC	390 $\pm$ 20%	100KHz,0.25V	500	1.6
CDRH129M-471MC	470 $\pm$ 20%	100KHz,0.25V	700	1.4
CDRH129M-561MC	560 $\pm$ 20%	100KHz,0.25V	900	1.3
CDRH129M-681MC	680 $\pm$ 20%	100KHz,0.25V	1100	1.2
CDRH129M-821MC	820 $\pm$ 20%	100KHz,0.25V	1300	1.1
CDRH129M-102MC	1000 $\pm$ 20%	100KHz,0.25V	1600	1.0

※ 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)
	W	P	A0	B0	K0	A	B	C	最小包装数(个/盘)
CDRH73M	16	12	7.6	7.6	3.80	330	100	13	1000
CDRH74M	16	12	7.8	7.8	4.60	330	100	13	1000
CDRH125M	24	16	12.5	12.5	6.30	330	100	13	500
CDRH127M	24	16	12.6	12.6	8.20	330	100	13	500
CDRH129M	24	16	12.6	12.6	10.30	330	100	13	350

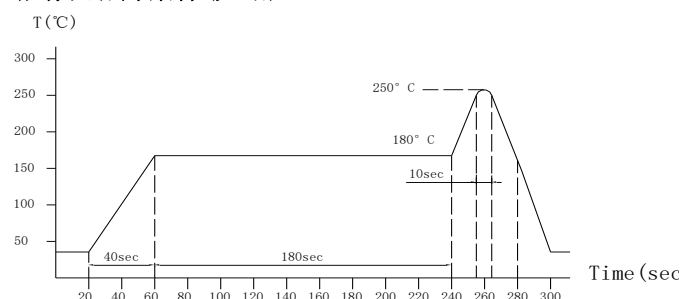
Dimensions without tolerance are reference. /无公差的尺寸为参考尺寸。

## 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)

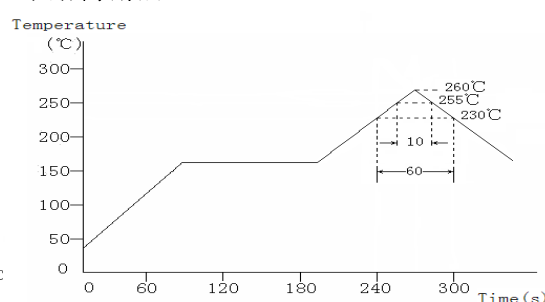
## /推荐回流焊条件(无铅)



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。