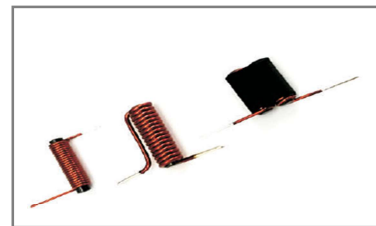


■磁棒电感器

Magnetic Rod Coils

◆特征 Feature

- *绝缘及防潮性能好、结构稳定耐震动冲击
- *Excellent insulation and moisture-proof performance, stable structure, resistant to vibration and impact
- *适用于大电流电路等特点.
- *Suitable for large current circuits.
- * 工业生产标准尺寸及多种脚型产品.
- *Standard size, various lead configuration.



◆应用 Application

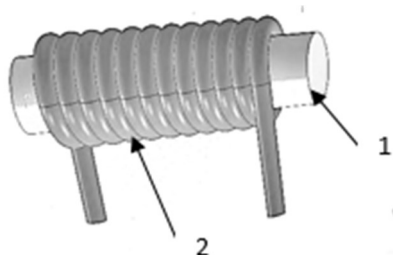
- *一般用途品.
- General purpose goods
- 通过了 AEC-Q200
- General purpose goods
- AEC-Q200 passed

◆型号表示法 Part Number

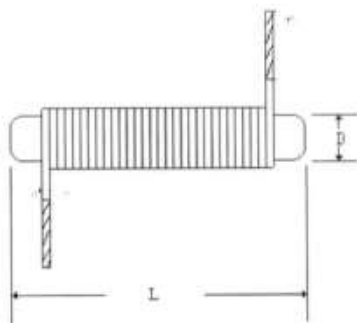
ADL	U	03	-	15
①	②	③		④

项目 Item	代码 code	描述 Description
①	DL	磁棒电感 Magnetic Rod Coils
②	U	封装形式: UL 套管 代码空缺表示无封装 Packaging form: UL sleeve Code vacancy means no encapsulation
③	03	磁芯外径 Core diameter
④	15	磁芯长度 Core length

◆产品结构 Product Structure



No.	组件 Component
1	磁芯 Core
2	线材 Wire

◆规格尺寸 Dimension


类型 Type	尺寸 Dimensions(mm)	
	L	ΦD
ADL2510	2.0	10
ADL0312	3.0	12
ADL0315	3.0	15
ADL0415	4.0	15
ADL0520	5.0	20
ADL0615	6.0	15
ADL0620	6.0	20
ADL0625	6.0	25

*不同规格的产品可以根据客户要求生产

*The products can be customized according to customer requirement.

◆工作温度范围 Operating Temperature Range

*工作温度范围(包括自身发热):(-25~+105)°C。

*Operating Temperature Range(Including self-heating):(-25~+105)°C.

◆电性能参数 Electrical Characteristics

型号 Part Number	电感量 L(μH)
ADL2510	0.5-15
ADL0312	0.5-15
ADL0315	0.5-15
ADL0415	0.5-15
ADL0520	0.5-15
ADL0615	0.5-15
ADL0620	0.5-15
ADL0625	0.5-15

*不同规格的产品可以根据客户要求生产

*The products can be customized according to customer requirement.

◆可靠性测试方法 Reliability Test Method

组别 Group	试验 项目 Test items	试验方法 test method	判定标准 Criteria
1	1.1 外观 appearance	目测 Visual inspection	符合产品标准要求 Meet the requirements of product standards
	1.2 尺寸 size	用精度不少于 0.01mm 的量具测量。 Measure with a measuring tool with an accuracy of no less than 0.01mm.	
	1.3 电性能 Electrical performance	由相应的测试仪进行测试 Test with the appropriate tester	
	2.1 可焊性 Weldability	预处理: 1h 蒸汽老化 焊槽温度: 245℃±5 °C 浸渍时间: 5s Pretreatment: 1h steam aging Welding groove temperature: 245 °C ± 5 °C Immersion time: 3s±0.3s	上锡率≥95% Tinning rate ≥ 95%
	2.2 恒定湿热 Steady damp-heat	验温度/湿度: 85℃@85%RH 试验时间: 1000h 恢复时间: 24h±2h Test temperature/humidity: 85 °C @ 85% RH Test time: 1000h Recovery time: 24h ± 2h	外观无明显损伤, There is no obvious damage to the appearance, -20%≤ΔL/L≤20%

2	2.3	引出端强度 Terminal tensile strength	引脚施加拉力: 14.5N 保持时间: 10s Pin applied tension: 14.5N Holding time: 10s	符合产品标准要求 Meet the requirements of product standards
	2.4	可燃性 flammability	样品置于纸包松木板上方 200mm 处, 用 12mm 针焰, 每一试样引燃 3 次, 分别引燃 10s、60s、120s Place the sample 200 mm above the paper wrapped pine board and ignite it for 3 times with a 12 mm needle flame for 10s, 60s and 120s respectively	外观无明显损伤, 产品电气性能符合要求 There is no obvious damage to the appearance, and the electrical performance of the product meets the requirements
	2.5	耐焊接热 Resistance to welding heat	焊槽温度: 260℃±5 °C 浸渍时间: (10±1) s Welding groove temperature: 260 °C± 5 °C Immersion time: (10 ± 1) s	外观无明显损伤, There is no obvious damage to the appearance, 20%≤ΔL/L≤20%
	2.6	温度冲击 Temperature shock	阶段 1: +125℃/30min Phase 1: +125 °C/30min 阶段 2: -40℃/30min Stage 2: - 40°C/30min 转换时间<1min, 循环次数: 1000 次 Conversion time < 5min, number of cycles: 1000 恢复时间: 24±2 h Recovery time: 24±2 h	外观无明显损伤, There is no obvious damage to the appearance, 20%≤ΔL/L≤20%
	2.7	工作寿命 working life	试验温度: 125℃ 施加电流: 额定电流 试验时间: 1000h 恢复时间: 24h±2h Test temperature: 125 °C Applied current: rated current Test time: 1000h Recovery time: 24h ± 2h	
	2.8	耐高温 High temperature resistance	试验温度: 125℃±2℃ 试验时间: (1000+24)h 恢复时间: 24h±2h Test temperature: 125 °C± 2 °C Test time: (1000+24) h Recovery time: 24h ± 2h	
	2.9	机械冲击 Mechanical shock	脉冲波形: 正半弦波 峰值加速度: 100g, 脉冲持续时间: 6ms 三轴六向各 3 次, 共 18 次 Pulse waveform: sine wave Peak acceleration: 100g, pulse duration: 6ms Three times for each of the three axes and six directions, 18 times in total	
	2.10	振动 Vibration	频率范围: 10 Hz~2000 Hz 加速度 5g, 一个循环 20min, X、Y、Z 方向各 12 个循环 (共 36 个循环) Frequency range: 10 Hz ~ 2000 Hz Acceleration 5g, one cycle for 20min, 12 cycles in X, Y and Z directions (36 cycles in total)	

◆包装 Packaging

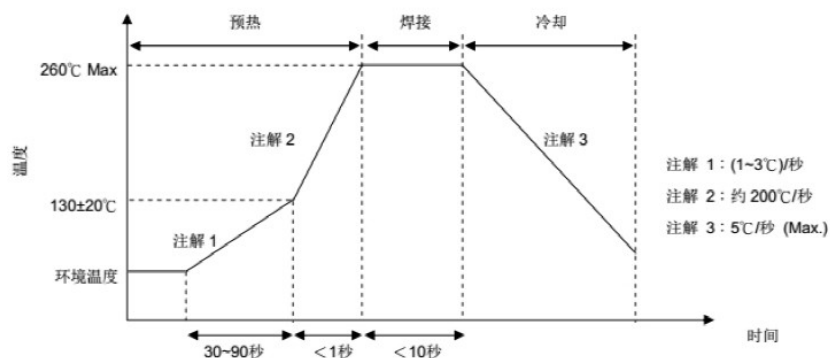
*包装数量单位 Packaging Quantity (单位: Unit: pcs)

型号规格	散包装 Bulk
DL2510	600PCS
DL0312	600PCS
DL0315	600PCS
DL0415	500PCS
DL0520	300PCS
DL0615	200PCS
DL0620	200PCS
DL0625	200PCS

◆推荐焊接条件 Recommended Soldering Conditions

*本产品建议使用波峰焊接法。Applicable soldering process to the products is reflow soldering.

* 焊接曲线 Soldering Profile



* 烙铁焊接 Soldering Iron

使用烙铁进行返修时要求在 150℃下预热至少 1 分钟，不能直接用焊头接触磁体，返修焊接条件如下：

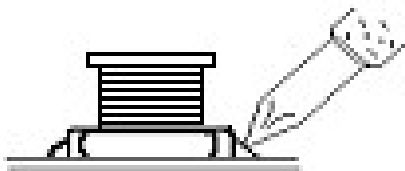
Reworking with Soldering Iron must preheating at 150℃ for 1 minute is required, and do not directly touch the core with the tip of the soldering iron. The reworking soldering conditions are as follows:

烙铁头温度：Temperature of soldering iron tip: 350℃;

烙铁输出功率：Soldering iron power output: 30W max.

烙铁头直径：≤1.0mm Diameter of soldering iron end: 1.0mm max.

焊接时间：Soldering time: within 3 sec.



◆ 贮存方法 Storage Methods

* 存储期限 Storage Period

为保证端子电极的焊接特性和包装材料处于良好状态，请于本公司发货后 6 个月内使用本产品。同时，由于端子电极的焊接特性会随时间发生变化，如果贮存时间超过 6 个月，请首先确认其焊接特性后再安装使用。

To maintain the solderability of terminal electrodes and to keep the packing material in good condition, product should be used within 6 months from the time of delivery. And the solderability of products electrodes may decrease as time passes, so in case of storage over 6 months, solderability shall be checked before actual usage.

* 存储条件 Storage conditions

存放货物的仓库应满足以下条件: The warehouse must meet with the following condition:

温度(Temperature): Inductors (product with taping): (+5~+35)℃;

相对湿度(Humidity): (30~70)%RH.

* 禁止将产品保管在腐蚀性物质中，如硫磺、氯气或酸，否则将引起端头氧化，导致降低焊接性。Don't keep products in corrosive gases such as sulfur, chlorine gas or acid, or it may cause oxidation of Electrodes resulting in poor solder ability.

* 为了避免受潮气、灰尘等物质的影响，产品应保管于货架上。

Products should be stored on the palette for the prevention of the influence from humidity, dust and so on.

* 产品保管在库房中，应避免热冲击、振动以及直接光照等等。

Products should be stored in the warehouse without heat shock, vibration, direct sunlight and so on.

* 产品应密封包装。

Products should be stored under the airtight packaged condition.

◆ 使用注意事项 Precautions For Use

* 本公司产品适用于 AV 设备、OA 设备、家电、信息服务等一般电子设备中。

Our products are designed and promoted for use in general electronic devices such as audio-video equipment, office automation equipment, home appliance and information service.

* 当本公司的产品使用在一般电子设备以外的领域时，对于此所引发的设备失效我司将不承担任何法律责任。

In case of using the product for the purpose other than general electronics devices, we shall not be held liable for any dysfunctions in or damage to the equipment with which the product is used.

* 本承诺书只保证我司产品作为一个单体时的质量情况，当我司产品被安装到贵司产品上时，请贵司对使用在贵司电路上的产品情况进行有效评价和确认。

Our specification limits the quality of the component as a single unit. Please ensure the component is thoroughly evaluated in your application circuit.

* 不要对产品施加过大的振动或机械冲击；

Do not apply excessive vibration or mechanical shock to products.

* 为防止断线，请不要使用锋利的物体接触线圈，如镊子

Do not touch wire with sharp objects such as tweezers to prevent wire breakage.

在产品贴装时不要使用过大的压力，避免磁芯断裂。

Do not apply excessive stress to products mounted on boards to prevent core breakage

■修改履历 Revision History

版本 Version No.	日期 Date	修订内容 Modify Details	修订人 Reviser
A0	2025-6-1	首次发行	

[illegible]

Note: The above content is the specification of products. Fenghua reserves the right to modify this content without prior notice, and any product changes will be notified to customers via PCN.