深圳市首韩科技有限公司
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# 承 认 书
# SPECIFICATION FOR APPROVAL

客 户 Customer：

产品名称 Project： 贴片电感

规格型号 Part No： CY54-1.0UH

**贵公司承认印 Approal slgnatures**

| 料 号/Part No. | 签 章/Signatures |
|---|---|
| | |

日期 Date:

| | | |
|---|---|---|
| 拟制/Drawn | 李春风 | |
| 审核/Check | 钟华华 | |
| 批准/Approved | 罗孝金 | |

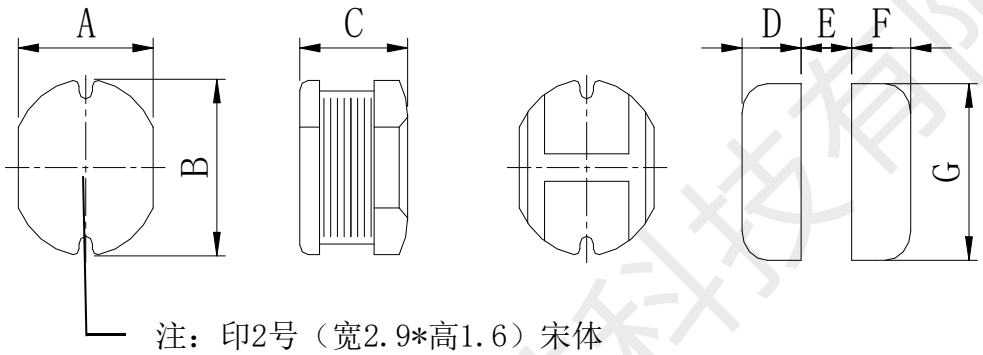
## 1.Features

①. High performance (Isat) realize by metal dust core.
②. Low profile: Thickness max.2.0～5.0mm.
③. Low loss and low resistance.
④. Capable of corresponding high frequency 1MHz～5MHz.
⑤ Ultra low buzz noise, due to composite construction.
⑥. The products contain no lead and also support lead-free soldering.

## 2.Applications area

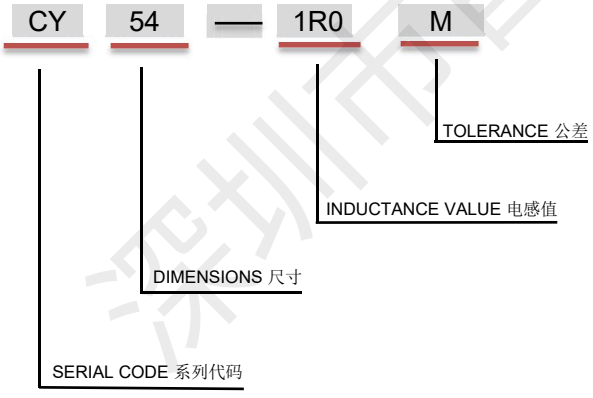
**Ideally used in NB/Desktop/server/Graphic card, LCD TV/Projector, etc as DC-DC Converter.**

## 3. Externl Dimensions (unit: mm)




UNIT: mm
A:5.2 ± 0.3
B:5.8 ± 0.3
C:4.5 ± 0.35
D:2.15
E:1.7
F:2.15
G:5.5

## 4. Product Code




| Code 代码 | Tolerance 公差 |
|---|---|
| J | ±5% |
| K | ±10% |
| L | ±15% |
| M | ±20% |
| P | ±25% |
| N | ±30% |

• 电感值Inductance Value
(1R0:1.0uH; 100: 10uH; 101:100uH)

## 5. Electrical Characteristics

| PART No. | NOMINAL INDUCTANCE ( uH ) | Test Freq. (kHz/v) | DCR ( Ω )MAX | IDC (A)MAX |
|---|---|---|---|---|
| CY54-1R0M | 1.0 | 100/0.25 | 13.00m | 5.40 |
| CY54-1R5M | 1.5 | 100/0.25 | 16.90m | 4.70 |
| CY54-1R8M | 1.8 | 100/0.25 | 19.50m | 4.50 |
| CY54-2R2M | 2.2 | 100/0.25 | 22.10m | 4.00 |
| CY54-3R3M | 3.3 | 100/0.25 | 31.20m | 3.70 |
| CY54-3R9M | 3.9 | 100/0.25 | 36.40m | 3.20 |
| CY54-4R7M | 4.7 | 100/0.25 | 52.00m | 3.10 |
| CY54-5R6M | 5.6 | 100/0.25 | 54.60m | 2.80 |
| CY54-6R8M | 6.8 | 100/0.25 | 58.50m | 2.40 |
| CY54-8R2M | 8.2 | 100/0.25 | 62.40m | 2.00 |
| CY54-100K | 10 | 100/0.25 | 87.90m | 1.42 |
| CY54-120K | 12 | 100/0.25 | 75.40m | 1.38 |
| CY54-150K | 15 | 100/0.25 | 105.30m | 1.28 |
| CY54-180K | 18 | 100/0.25 | 117.00m | 1.22 |
| CY54-220K | 22 | 100/0.25 | 169.00m | 1.10 |
| CY54-270K | 27 | 100/0.25 | 153.40m | 950m |
| CY54-330K | 33 | 100/0.25 | 208.00m | 860m |
| CY54-390K | 39 | 100/0.25 | 214.50m | 780m |
| CY54-470K | 47 | 100/0.25 | 355.00m | 710m |
| CY54-560K | 56 | 100/0.25 | 377.00m | 660m |
| CY54-680K | 68 | 100/0.25 | 390.00m | 600m |
| CY54-820K | 82 | 100/0.25 | 416.00m | 570m |
| CY54-101K | 100 | 100/0.25 | 611.00m | 510m |
| CY54-121K | 120 | 100/0.25 | 754.00m | 470m |
| CY54-151K | 150 | 100/0.25 | 845.00m | 380m |
| CY54-181K | 180 | 100/0.25 | 1.04 | 360m |
| CY54-221K | 220 | 100/0.25 | 1.45 | 340m |
| CY54-271K | 270 | 100/0.25 | 1.51 | 310m |
| CY54-331K | 330 | 100/0.25 | 1.76 | 280m |
| CY54-391K | 390 | 100/0.25 | 2.08 | 260m |
| CY54-471K | 470 | 100/0.25 | 2.99 | 240m |
| CY54-561K | 560 | 100/0.25 | 3.12 | 220m |
| CY54-681K | 680 | 100/0.25 | 3.90 | 200m |
| CY54-821K | 820 | 100/0.25 | 5.20 | 190m |

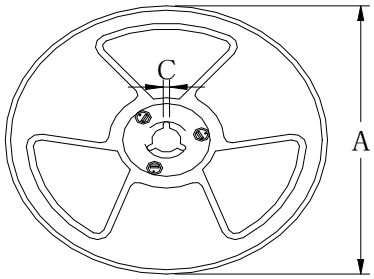
• **Notes**

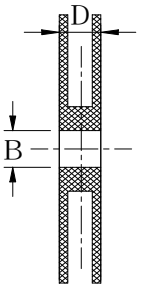
1. All test data is referenced to 25 °C ambient
2. Operating temperature range - 55 °C to + 125 °C
3. Irms (A):DC current (A) that will cause an approximate ΔT of 40 °C(reference ambient temperature is 25 °C)
4. Isat(A):DC current (A) that will cause L0 to drop approximately 30 %
5. The part temperature (ambient + temp rise) should not exceed 125 °C under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

6.Absolute maximum voltage 30VDC

## 6.Minimum Packaging and storage

• 包装Packing



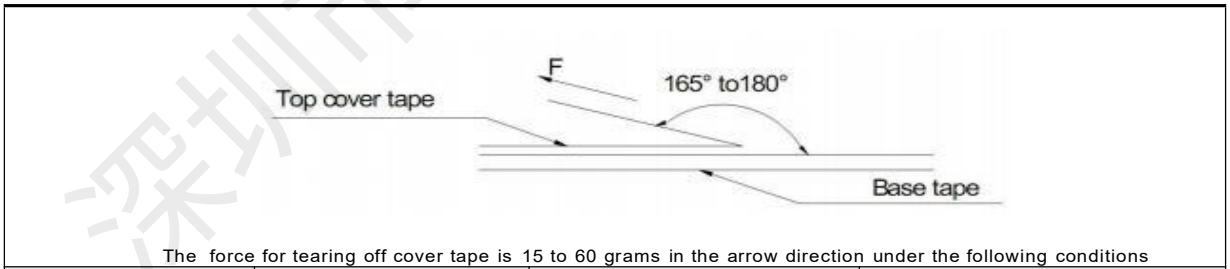




| 规格 / 尺寸 | 13" | 7" |
|---|---|---|
| A | Φ330±2.0 | Φ178±2.0 |
| B | Φ90 ± 2.0 | |
| C | 2. 3 | |
| D | 21. 5 | 1500/盘 |

• **Tape Carrier Packaging**:

| Type | Standard Quantity (pcs/reel) | Type | Standard Quantity (pcs/reel) |
|---|---|---|---|
| CY32 | **3000** | CY73 | **1000** |
| CY42 | **3000** | CY75 | **1000** |
| CY43 | **2000** | CY77 | **600** |
| CY53 | **2000** | CY105 | **1000** |
| CY54 | **1500** | CY106 | **800** |

• **Tearing Off Force**




The force for tearing off cover tape is 15 to 60 grams in the arrow direction under the following conditions

| Room Temp. ( )℃ | Room Humidity (%) | Room atm (hPa) | Tearing Speed mm/min |
|---|---|---|---|
| 5~35 | 45~85 | 860~1060 | 300 |

• **Application Notice**

Storage ConditionsTo maintain the solderability of terminal electrodes:

1. Temperature and humidity conditions: Less than 30℃ and 70% RH.
2. Recommended products should be used within 6 months form the time of delivery.
3. The packaging material should be kept where no chlorine or sulfur exists in the air.

Transportation

1. Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
2. The use of tweezers or vacuum pick up is strongly recommended for individual components. Bulk handling should ensure that abrasion and mechanical shock are minimized.