



ISO9001-2015  
Certificate No:672Q22020207194

No.T52210311961TC Date;OCT 12,2022 No.T52310270397TC Date;apr 15,2023

# 承認書

## SPECIFICATION FOR APPROVAL

客户名稱  
CUSTOMER

品名規格  
DESCRIPTION

HYCD2139-0730A

客户料號  
CUS. P/N

提出日期  
DATE

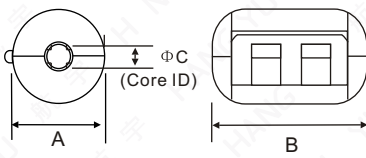
2025.5.12

| 出 圖<br>RDAWING |                |                 |
|----------------|----------------|-----------------|
| 發 行<br>MADE    | 復 核<br>CHECKED | 確 認<br>APPROVED |
| 武卫锋            | 陆卯生            | 林萍              |
| 销售部：张 丽        |                |                 |

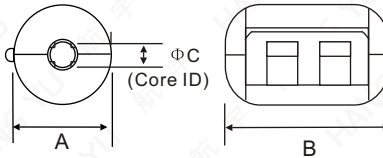
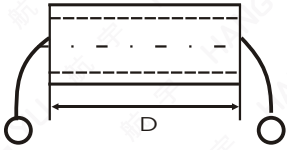
| 承 認<br>CUSTOMER APPROVE |
|-------------------------|
|                         |

# 承認書

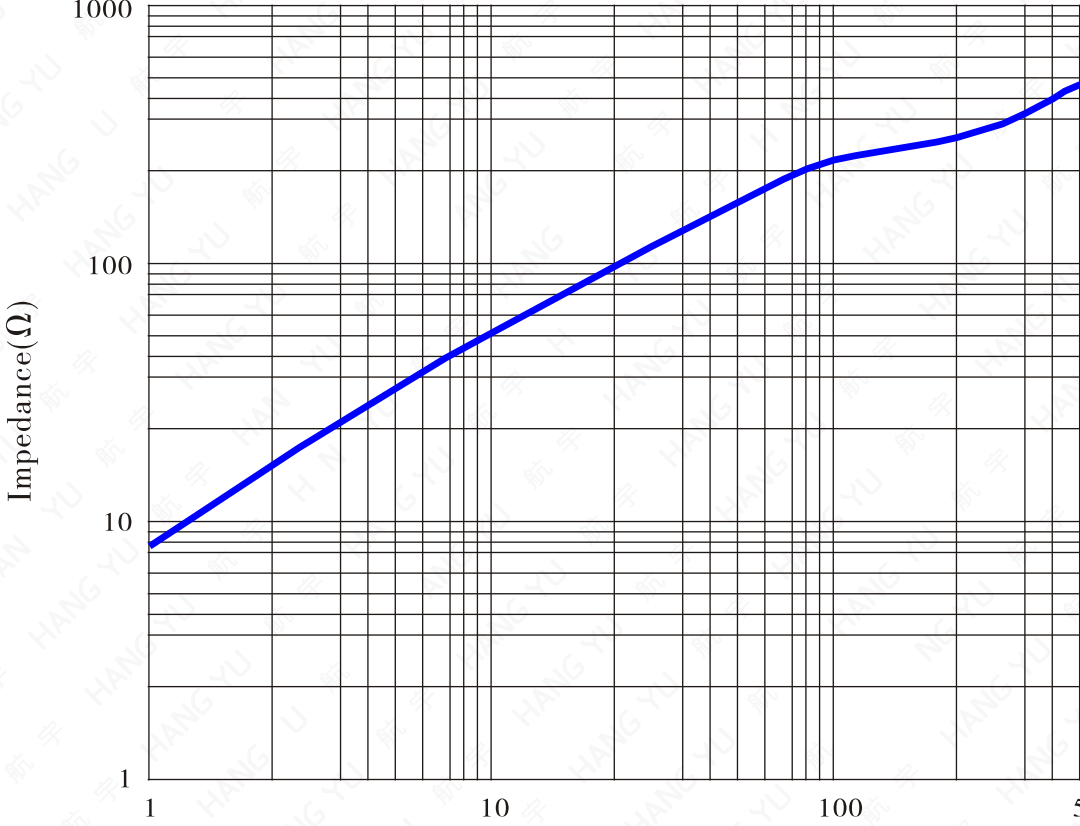
## SPECIFICATION FOR APPROVAL

|                                                                                                                                                                                                                                                                           |                                                                       |                                                                                   |               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------|
| 客戶名稱<br>CUSTOMER                                                                                                                                                                                                                                                          |                                                                       | 日期<br>DATE                                                                        | 2025.5.12     |
| 規格<br>ITEM                                                                                                                                                                                                                                                                | HYCD2139-0730A                                                        | 編號<br>SERIAL NO.                                                                  |               |
| 1.1. 形狀尺寸(單位/毫米):<br>SHAPE & DIMENSION(unit/mm):                                                                                                                                                                                                                          |                                                                       | 1.2. 實物圖:<br>The Sample::                                                         |               |
|                                                                                                                                                                                          |                                                                       |  |               |
|                                                                                                                                                                                                                                                                           |                                                                       | A                                                                                 | 20.7 ± 1.0 mm |
|                                                                                                                                                                                                                                                                           |                                                                       | B                                                                                 | 39.4 ± 1.0 mm |
|                                                                                                                                                                                                                                                                           |                                                                       | C                                                                                 | 7.2 ± 0.5 mm  |
|                                                                                                                                                                                                                                                                           |                                                                       | D                                                                                 |               |
|                                                                                                                                                                                                                                                                           |                                                                       | E                                                                                 |               |
|                                                                                                                                                                                                                                                                           |                                                                       | F                                                                                 |               |
|                                                                                                                                                                                                                                                                           |                                                                       | G                                                                                 |               |
|                                                                                                                                                                                                                                                                           |                                                                       | H                                                                                 |               |
| 2. 電氣性能檢測項目:<br>ELECTRICAL REQUIREMENTS:                                                                                                                                                                                                                                  |                                                                       | 測試儀器<br>TEST INSTRUMENTS                                                          |               |
| <input type="checkbox"/> L                                                                                                                                                                                                                                                |                                                                       | TEST FREQ                                                                         | KHZ<br>MHZ    |
| <input type="checkbox"/> Q                                                                                                                                                                                                                                                |                                                                       | TEST FREQ                                                                         | KHZ<br>MHZ    |
| <input checked="" type="checkbox"/> Z                                                                                                                                                                                                                                     | Z1= 100Ω MIN 25 KHZ<br>Z2= 190Ω MIN 100 KHZ<br>Z3= / KHZ<br>Z4= / KHZ |                                                                                   |               |
| 溫度<br>TEMP                                                                                                                                                                                                                                                                | ℃                                                                     | 濕度<br>HUMIDITY                                                                    | %             |
| 線組<br>WINDING Φ0.5x0.5TSx100L(mm)                                                                                                                                                                                                                                         |                                                                       |                                                                                   |               |
| 1. Q-METER:<br>○HP 4342A ○MQ-172                                                                                                                                                                                                                                          |                                                                       |                                                                                   |               |
| 2. L.C.R. METER:<br>○HP 4284A                                                                                                                                                                                                                                             |                                                                       |                                                                                   |               |
| 3. IMPEDANCE ANALYZER:<br>○HP 4396B ○HP 4191A ØE4991A<br>ØAgilent 16194A-TESTFIXTURE                                                                                                                                                                                      |                                                                       |                                                                                   |               |
| 4. L-METER:<br>○TH 2775B                                                                                                                                                                                                                                                  |                                                                       |                                                                                   |               |
| 5. DIGITAL MINI-OHMMETER:<br>○VP2941A                                                                                                                                                                                                                                     |                                                                       |                                                                                   |               |
| 3. 外觀:<br>THE LIMIT OF BREAKAGE:                                                                                                                                                                                                                                          |                                                                       |                                                                                   |               |
| 項目<br>Item                                                                                                                                                                                                                                                                |                                                                       | 標準值<br>Standard Value                                                             |               |
| 一處缺陷的面積<br>Area of a breakage                                                                                                                                                                                                                                             |                                                                       | ≤1mm <sup>2</sup>                                                                 |               |
| 總缺陷面積<br>All area of the breakage                                                                                                                                                                                                                                         |                                                                       | ≤2mm <sup>2</sup>                                                                 |               |
| 缺陷深度<br>The depth of the breakage                                                                                                                                                                                                                                         |                                                                       | ≤0.4mm                                                                            |               |
| 毛刺長度<br>The length of burr                                                                                                                                                                                                                                                |                                                                       | ≤0.2mm                                                                            |               |
| 4. 包裝:<br>PACKAGING:<br>內包裝採用泡塑盒, 外包裝採用紙箱, 每箱產品外面都蓋上合格章(包括品名、數量、批號、檢驗員)。<br>Inner packing adopts foam plastics box, outer packing adopts carton and each carton should have a qualified chapter label outside(include the variety, quantity, batch number and inspector). |                                                                       |                                                                                   |               |

檢驗數據  
INSPECTION DATA

|                                                                                                                                     |                                  |               |                        |        |       |                                                                                    |                                 |                                                                                                             |                 |       |   |   |
|-------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|---------------|------------------------|--------|-------|------------------------------------------------------------------------------------|---------------------------------|-------------------------------------------------------------------------------------------------------------|-----------------|-------|---|---|
| 客戶名稱<br>CUSTOMER                                                                                                                    |                                  |               |                        |        |       | 日期<br>DATE                                                                         | 2025.5.12                       |                                                                                                             | 數量<br>QUANTITY  | 10PCS |   |   |
| 編號<br>SERIAL NO.                                                                                                                    |                                  |               |                        |        |       | 形狀尺寸(單位/毫米):<br>SHAPE & DIMENSION(unit/mm):                                        |                                 | 實物圖:<br>The Sample::<br> |                 |       |   |   |
| 規格<br>ITEM                                                                                                                          | HYCD2139-0730A                   |               |                        |        |       |                                                                                    |                                 |                                                                                                             |                 |       |   |   |
| 線組<br>WINDING                                                                                                                       | Φ0.5x0.5TSx100L(mm)              |               |                        |        |       |                                                                                    |                                 |                                                                                                             |                 |       |   |   |
| 測試頻率<br>TEST FREQ                                                                                                                   | Z1=     KHZ<br>25 MHZ            |               | Z2=     KHZ<br>100 MHZ |        |       |                                                                                    |                                 |                                                                                                             |                 |       |   |   |
|                                                                                                                                     | Z3=     KHZ<br>MHZ               |               | Z4=     KHZ<br>MHZ     |        |       |  |                                 |                                                                                                             |                 |       |   |   |
| 溫度<br>TEMP                                                                                                                          | ℃                                |               | 濕度<br>HUMIDITY         |        | %     |                                                                                    |                                 |                                                                                                             |                 |       |   |   |
| 項目<br>TEST<br>ITEM                                                                                                                  | 電氣性能<br>ELECTRIC CHARACTERISTICS |               |                        |        |       |                                                                                    | 尺寸(單位:毫米)<br>DIMENSION(unit:mm) |                                                                                                             |                 |       |   |   |
|                                                                                                                                     | Q                                | L(μH)<br>(MH) | Z1(Ω)                  | Z2(Ω)  | Z3(Ω) | Z4(Ω)                                                                              | A                               | B                                                                                                           | C               | D     | E | F |
|                                                                                                                                     |                                  |               | 100                    | 190    |       |                                                                                    | 20.7                            | 39.4                                                                                                        | 7.2             |       |   |   |
| +                                                                                                                                   |                                  |               | /                      | /      |       |                                                                                    | 1.0                             | 1.0                                                                                                         | 0.5             |       |   |   |
| -                                                                                                                                   |                                  |               | 0                      | 0      |       |                                                                                    | 1.0                             | 1.0                                                                                                         | 0.5             |       |   |   |
| 1                                                                                                                                   |                                  |               | 117.2                  | 219.6  |       |                                                                                    | 20.70                           | 39.13                                                                                                       | 8.26            |       |   |   |
| 2                                                                                                                                   |                                  |               | 117.1                  | 219.4  |       |                                                                                    | 20.68                           | 39.26                                                                                                       | 8.08            |       |   |   |
| 3                                                                                                                                   |                                  |               | 116.2                  | 219.1  |       |                                                                                    | 20.64                           | 39.38                                                                                                       | 8.15            |       |   |   |
| 4                                                                                                                                   |                                  |               | 116.1                  | 220.4  |       |                                                                                    | 20.66                           | 39.39                                                                                                       | 8.08            |       |   |   |
| 5                                                                                                                                   |                                  |               | 116.5                  | 221.1  |       |                                                                                    | 20.59                           | 39.40                                                                                                       | 8.06            |       |   |   |
| 6                                                                                                                                   |                                  |               | 116.8                  | 220.5  |       |                                                                                    | 20.59                           | 39.42                                                                                                       | 8.10            |       |   |   |
| 7                                                                                                                                   |                                  |               | 117.2                  | 219.8  |       |                                                                                    | 20.70                           | 39.40                                                                                                       | 8.16            |       |   |   |
| 8                                                                                                                                   |                                  |               | 116.9                  | 220.6  |       |                                                                                    | 20.66                           | 39.18                                                                                                       | 8.20            |       |   |   |
| 9                                                                                                                                   |                                  |               | 116.4                  | 220.3  |       |                                                                                    | 20.64                           | 39.35                                                                                                       | 8.22            |       |   |   |
| 10                                                                                                                                  |                                  |               | 116.7                  | 220.4  |       |                                                                                    | 20.68                           | 39.28                                                                                                       | 8.12            |       |   |   |
| X̄                                                                                                                                  |                                  |               | 116.54                 | 220.48 |       |                                                                                    | 20.65                           | 39.31                                                                                                       | 8.14            |       |   |   |
| Y/N                                                                                                                                 |                                  |               | Y                      | Y      |       |                                                                                    | Y                               | Y                                                                                                           | Y               |       |   |   |
| 測試儀器:<br>TEST INSTRUMENTS:<br><br>E4991A+16194A  |                                  |               |                        |        |       |                                                                                    | 檢 驗<br>INSPECTED                | 復 核<br>CHECKED                                                                                              | 確 認<br>APPROVED |       |   |   |
|                                                                                                                                     |                                  |               |                        |        |       |                                                                                    | 武卫锋                             | 陆卯生                                                                                                         | 林萍              |       |   |   |

阻抗 - 頻率曲綫  
IMPEDANCE V.S FREQUENCY (Z-Y)

|                                                                                                                                                                             |                               |                               |                                           |                                            |                   |                   |                            |                               |                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------|-------------------------------------------|--------------------------------------------|-------------------|-------------------|----------------------------|-------------------------------|-------------------|
| 客戶名稱<br>CUSTOMER                                                                                                                                                            |                               |                               | 日期<br>DATE                                |                                            |                   | 2025.5.12         |                            |                               |                   |
| 規 格<br>ITEM                                                                                                                                                                 |                               |                               | HYCD2139-0730A                            |                                            |                   | 編 號<br>SERIAL NO. |                            |                               |                   |
| 材質特性 MATERIAL CHARACTERISTICS                                                                                                                                               |                               |                               |                                           |                                            |                   |                   |                            |                               |                   |
| 材料牌號<br>Mate-rial                                                                                                                                                           | 初始磁導率<br>Initial Permeability | 比損耗因子<br>Relative Loss Factor | 比溫度系數<br>Relative Temperature Coefficient | 飽和磁通密度<br>Saturation Magnetic Flux Density | 剩 磁<br>Reman-ence | 矯頑力<br>Coercivity | 居裏溫度<br>Curie Tempera-ture | 電阻率<br>Electrical Resistivity | 密度<br>Density     |
| Unit                                                                                                                                                                        | $\mu_i$                       | $\tan \delta / \mu_i$         | $\alpha \mu_i / \gamma$                   | <b>Bs</b>                                  | <b>Br</b>         | <b>HC</b>         | <b>Tc</b>                  | $\rho$                        | <b>d</b>          |
| symbol                                                                                                                                                                      | ±20%                          | $\times 10^{-6}$              | $\times 10^{-6}$                          | (MT)                                       | (MT)              | (A/m)             | (℃)                        | ( $\Omega \cdot m$ )          | g/cm <sup>3</sup> |
|                                                                                                                                                                             |                               | 16 (0.1MHz)                   | 5 - 10                                    | 280(1600A/m)                               | 200               | 20                | >130                       | >10 <sup>5</sup>              | 4.6               |
| <div><div>Impedance(<math>\Omega</math>)</div><div></div><div>Frequency(MHz)</div></div> |                               |                               |                                           |                                            |                   |                   |                            |                               |                   |
| 測試條件：<br>TESTING CONDITION:                                                                                                                                                 |                               |                               |                                           |                                            |                   |                   |                            |                               |                   |
| 1. 測試儀器：<br>Testing Equipment:                                                                                                                                              |                               |                               |                                           | E4991A+16194A                              |                   | 測 試<br>TESTED     |                            | 復 核<br>CHECKED                |                   |
| 2. 測試頻率區間：<br>Testing Frequency Range:                                                                                                                                      |                               |                               |                                           | 1-500MHz                                   |                   | 武卫锋               |                            | 陆卯生                           |                   |
| 3. 測試綫組：<br>Testing Coil Specification:                                                                                                                                     |                               |                               |                                           | Φ0.5x0.5TSx100L(mm)                        |                   |                   |                            |                               |                   |