



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 RH 16×28×7

客户料號  
CUS. P/N

提出日期  
DATE 2025.05.12

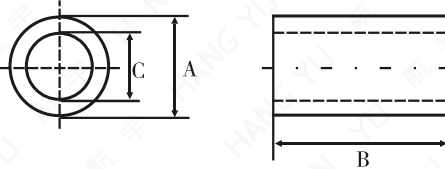
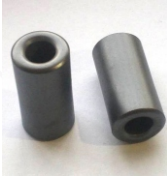
| 出 圖<br>RDAWING |                |                 |
|----------------|----------------|-----------------|
| 發 行<br>MADE    | 復 核<br>CHECKED | 確 認<br>APPROVED |
| 李光赫            | 方煜镗            | 梁琼              |
| 销售部：张 丽        |                |                 |

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



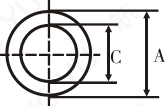
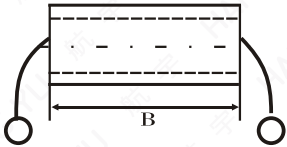
深圳市航宇磁电有限公司

承 認 書  
SPECIFICATION FOR APPROVAL

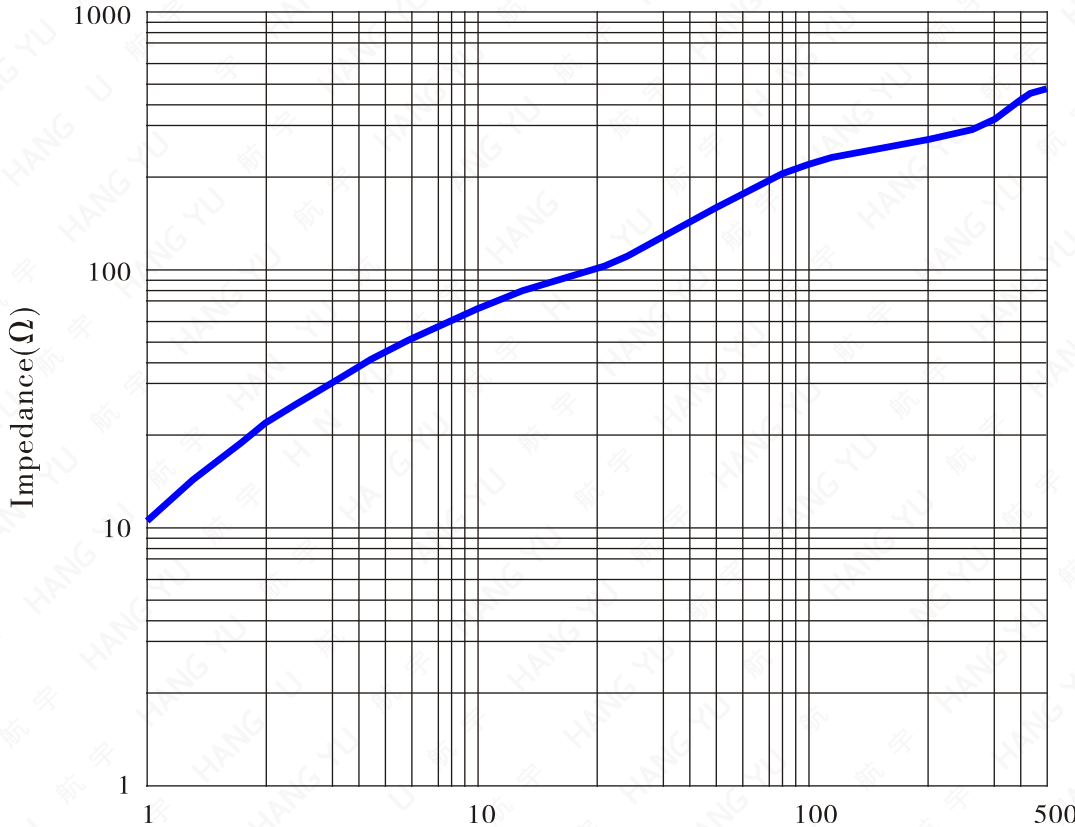
|                                                                                                                                                                                                                                                                                                  |            |                       |                          |                |                 |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------------------|--------------------------|----------------|-----------------|--|
| 客戶名稱<br>CUSTOMER                                                                                                                                                                                                                                                                                 |            | 日 期<br>DATE           | 2025.05.12               |                |                 |  |
| 規 格<br>ITEM                                                                                                                                                                                                                                                                                      | RH 16×28×7 |                       | 編 號<br>SERIAL NO.        |                |                 |  |
| <div>1.1. 形狀尺寸(單位/毫米):<br/>SHAPE &amp; DIMENSION(unit/mm):</div> <div></div> <div>1.2. 實物圖:<br/>The Sample::</div> <div></div> |            |                       | A                        | 16 ± 0.5 mm    |                 |  |
|                                                                                                                                                                                                                                                                                                  |            |                       | B                        | 28 ± 0.7 mm    |                 |  |
|                                                                                                                                                                                                                                                                                                  |            |                       | C                        | 7 ± 0.4mm      |                 |  |
|                                                                                                                                                                                                                                                                                                  |            |                       | 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<br>FREQ          | KHZ<br>MHZ               |                |                 |  |
| <input type="checkbox"/> Q                                                                                                                                                                                                                                                                       |            | TEST<br>FREQ          | KHZ<br>MHZ               |                |                 |  |
| <input checked="" type="checkbox"/> Z                                                                                                                                                                                                                                                            | Z1=90Ω MIN | KHZ<br>25 MHZ         | Z2= 180Ω MIN             | KHZ<br>100 MHZ |                 |  |
|                                                                                                                                                                                                                                                                                                  | Z3=        | KHZ<br>MHZ            | Z4=                      | KHZ<br>MHZ     |                 |  |
| 溫 度<br>TEMP                                                                                                                                                                                                                                                                                      | ℃          | 濕 度<br>HUMIDITY       | %                        |                |                 |  |
| 綫 組<br>WINDING                                                                                                                                                                                                                                                                                   |            |                       | Φ0.5x0.5TSx100L(mm)      |                |                 |  |
| 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                |                          |                |                 |  |
| 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 | 確 認<br>APPROVED |  |
| 2. 測試頻率區間:<br>Testing Frequency Range:                                                                                                                                                                                                                                                           |            | 1-500MHz              | 李光赫                      | 方煜镗            | 梁琮              |  |
| 3. 測試綫組:<br>Testing Coil Specification:                                                                                                                                                                                                                                                          |            | Φ0.5x0.5TSx100L(mm)   |                          |                |                 |  |

深圳市航宇磁电有限公司

檢驗數據  
INSPECTION DATA

|                                                                                                                                        |                                  |               |                        |        |       |                                                                                                                                  |                                 |                                                                                                             |                 |       |   |   |  |
|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|---------------|------------------------|--------|-------|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------|-------------------------------------------------------------------------------------------------------------|-----------------|-------|---|---|--|
| 客戶名稱<br>CUSTOMER                                                                                                                       |                                  |               |                        |        |       | 日期<br>DATE                                                                                                                       | 2025.05.12                      |                                                                                                             | 數量<br>QUANTITY  | 10PCS |   |   |  |
| 編號<br>SERIAL NO.                                                                                                                       |                                  |               |                        |        |       | 形狀尺寸(單位:毫米):<br>SHAPE & DIMENSION(unit:mm):<br> |                                 | 實物圖:<br>The Sample::<br> |                 |       |   |   |  |
| 規格<br>ITEM                                                                                                                             | RH 16x28x7                       |               |                        |        |       |                                                                                                                                  |                                 |                                                                                                             |                 |       |   |   |  |
| 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 |  |
|                                                                                                                                        |                                  |               | 90                     | 180    |       |                                                                                                                                  | 16                              | 28                                                                                                          | 7               |       |   |   |  |
| +                                                                                                                                      |                                  |               | /                      | /      |       |                                                                                                                                  | 0.5                             | 0.7                                                                                                         | 0.4             |       |   |   |  |
| -                                                                                                                                      |                                  |               | 0                      | 0      |       |                                                                                                                                  | 0.5                             | 0.7                                                                                                         | 0.4             |       |   |   |  |
| 1                                                                                                                                      |                                  |               | 115.6                  | 225.2  |       |                                                                                                                                  | 15.86                           | 27.73                                                                                                       | 6.93            |       |   |   |  |
| 2                                                                                                                                      |                                  |               | 115.8                  | 224.6  |       |                                                                                                                                  | 16.02                           | 27.79                                                                                                       | 7.04            |       |   |   |  |
| 3                                                                                                                                      |                                  |               | 116.4                  | 225.8  |       |                                                                                                                                  | 16.05                           | 27.83                                                                                                       | 7.08            |       |   |   |  |
| 4                                                                                                                                      |                                  |               | 116.2                  | 225.4  |       |                                                                                                                                  | 16.08                           | 27.76                                                                                                       | 7.06            |       |   |   |  |
| 5                                                                                                                                      |                                  |               | 116.0                  | 225.0  |       |                                                                                                                                  | 16.03                           | 27.74                                                                                                       | 6.90            |       |   |   |  |
| 6                                                                                                                                      |                                  |               | 115.5                  | 224.0  |       |                                                                                                                                  | 15.97                           | 27.78                                                                                                       | 6.94            |       |   |   |  |
| 7                                                                                                                                      |                                  |               | 115.4                  | 224.4  |       |                                                                                                                                  | 15.82                           | 27.80                                                                                                       | 7.02            |       |   |   |  |
| 8                                                                                                                                      |                                  |               | 116.1                  | 223.6  |       |                                                                                                                                  | 15.91                           | 27.77                                                                                                       | 7.11            |       |   |   |  |
| 9                                                                                                                                      |                                  |               | 115.7                  | 223.8  |       |                                                                                                                                  | 15.95                           | 27.84                                                                                                       | 6.96            |       |   |   |  |
| 10                                                                                                                                     |                                  |               | 116.3                  | 223.6  |       |                                                                                                                                  | 16.05                           | 27.75                                                                                                       | 6.95            |       |   |   |  |
| $\bar{X}$                                                                                                                              |                                  |               | 115.90                 | 224.54 |       |                                                                                                                                  | 15.97                           | 27.77                                                                                                       | 6.99            |       |   |   |  |
| Y/N                                                                                                                                    |                                  |               | Y                      | Y      |       |                                                                                                                                  | Y                               | Y                                                                                                           | Y               |       |   |   |  |
| 測試儀器:<br>TEST INSTRUMENTS:<br><br>E4991A+16194A<br> |                                  |               |                        |        |       |                                                                                                                                  | 檢 驗<br>INSPECTED                | 復 核<br>CHECKED                                                                                              | 確 認<br>APPROVED |       |   |   |  |
|                                                                                                                                        |                                  |               |                        |        |       |                                                                                                                                  | 李光赫                             | 方煜镗                                                                                                         | 梁琮              |       |   |   |  |

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

|                                                                                                                                                                             |                               |                                           |                                             |                                            |                   |                   |                           |                                |                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------------------|---------------------------------------------|--------------------------------------------|-------------------|-------------------|---------------------------|--------------------------------|------------------------|
| 客戶名稱<br>CUSTOMER                                                                                                                                                            |                               |                                           | 日期<br>DATE                                  |                                            |                   | 2025.05.12        |                           |                                |                        |
| 規 格<br>ITEM                                                                                                                                                                 |                               | RH 16x28x7                                |                                             |                                            | 編 號<br>SERIAL NO. |                   |                           |                                |                        |
| MATERIAL CHARACTERISTICS                                                                                                                                                    |                               |                                           |                                             |                                            |                   |                   |                           |                                |                        |
| 材料牌號<br>Material                                                                                                                                                            | 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>Remanence  | 矯頑力<br>Coercivity | 居裏溫度<br>Curie Temperature | 電阻率<br>Electrical Resistivity  | 密度<br>Density          |
| Unit symbol                                                                                                                                                                 | $\mu_i$<br>$\pm 20\%$         | $\tan \delta / \mu_i$<br>$\times 10^{-6}$ | $\alpha \mu_i / \gamma$<br>$\times 10^{-6}$ | Bs<br>(MT)                                 | Br<br>(MT)        | HC<br>(A/m)       | Tc<br>(℃)                 | $\rho$<br>( $\Omega \cdot m$ ) | d<br>g/cm <sup>3</sup> |
|                                                                                                                                                                             |                               | 20 (0.1MHz)                               | 2 - 5                                       | 260(1600A/m)                               | 150               | 35                | >140                      | >10 <sup>5</sup>               | 4.6                    |
| <div><div>Impedance(<math>\Omega</math>)</div><div></div><div>Frequency(MHz)</div></div> |                               |                                           |                                             |                                            |                   |                   |                           |                                |                        |
| 客戶簽回欄                                                                                                                                                                       | 确 認                           | 审 核                                       | 測 試<br>TESTED                               |                                            |                   | 復 核<br>CHECKED    | 確 認<br>APPROVED           |                                |                        |
|                                                                                                                                                                             |                               |                                           | 李光赫                                         |                                            |                   | 方煜镗               | 梁琼                        |                                |                        |