



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 R7K HY28A2024-0A2

客户料號  
CUS. P/N

提出日期  
DATE 2025.05.12

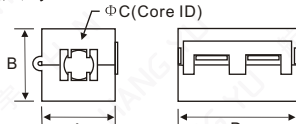
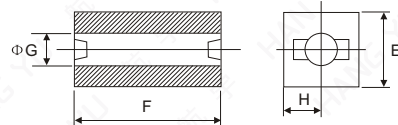
| 出 圖<br>RDAWING |                |                 |
|----------------|----------------|-----------------|
| 發 行<br>MADE    | 復 核<br>CHECKED | 確 認<br>APPROVED |
| 李光赫            | 方煜镗            | 梁琼              |
| 销售部：张 丽        |                |                 |

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

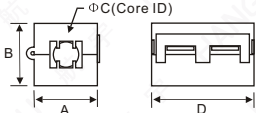
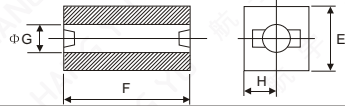
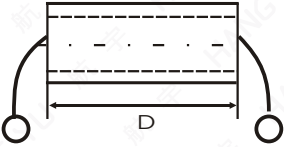


承 認 書

SPECIFICATION FOR APPROVAL

|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                  |                                                     |                                                 |                                                                                               |                      |                   |                                   |                                  |                                     |                        |         |         |         |         |      |                              |    |    |    |    |    |    |    |    |                                     |   |   |   |   |   |   |   |   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-----------------------------------------------------|-------------------------------------------------|-----------------------------------------------------------------------------------------------|----------------------|-------------------|-----------------------------------|----------------------------------|-------------------------------------|------------------------|---------|---------|---------|---------|------|------------------------------|----|----|----|----|----|----|----|----|-------------------------------------|---|---|---|---|---|---|---|---|
| 客戶名稱<br>CUSTOMER                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                  |                                                     |                                                 | 日期<br>DATE                                                                                    | 2025.05.12           |                   |                                   |                                  |                                     |                        |         |         |         |         |      |                              |    |    |    |    |    |    |    |    |                                     |   |   |   |   |   |   |   |   |
| 規格<br>ITEM                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  | R7K HY28A2024-0A2                                   |                                                 | 編號<br>SERIAL NO.                                                                              |                      |                   |                                   |                                  |                                     |                        |         |         |         |         |      |                              |    |    |    |    |    |    |    |    |                                     |   |   |   |   |   |   |   |   |
| <div>1.1. 形狀尺寸(單位/毫米):<br/>SHAPE &amp; DIMENSION(unit/mm):</div> <div>外殼尺寸:<br/></div> <div>磁芯尺寸:<br/></div> <div>1.2. 實物圖:<br/>The Sample::<br/></div>                                           |                                  |                                                     |                                                 | A                                                                                             | 29.0 ± 1.0 mm        |                   |                                   |                                  |                                     |                        |         |         |         |         |      |                              |    |    |    |    |    |    |    |    |                                     |   |   |   |   |   |   |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                  |                                                     |                                                 | B                                                                                             | 30.0 ± 1.0 mm        |                   |                                   |                                  |                                     |                        |         |         |         |         |      |                              |    |    |    |    |    |    |    |    |                                     |   |   |   |   |   |   |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                  |                                                     |                                                 | C                                                                                             | 13.0 ± 0.8 mm        |                   |                                   |                                  |                                     |                        |         |         |         |         |      |                              |    |    |    |    |    |    |    |    |                                     |   |   |   |   |   |   |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                  |                                                     |                                                 | D                                                                                             | 32.0 ± 1.0 mm        |                   |                                   |                                  |                                     |                        |         |         |         |         |      |                              |    |    |    |    |    |    |    |    |                                     |   |   |   |   |   |   |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                  |                                                     |                                                 | E                                                                                             | 26.0 ± 0.8 mm        |                   |                                   |                                  |                                     |                        |         |         |         |         |      |                              |    |    |    |    |    |    |    |    |                                     |   |   |   |   |   |   |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                  |                                                     |                                                 | F                                                                                             | 29.4 ± 0.8 mm        |                   |                                   |                                  |                                     |                        |         |         |         |         |      |                              |    |    |    |    |    |    |    |    |                                     |   |   |   |   |   |   |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                  |                                                     |                                                 | G                                                                                             | 13.0 ± 0.5 mm        |                   |                                   |                                  |                                     |                        |         |         |         |         |      |                              |    |    |    |    |    |    |    |    |                                     |   |   |   |   |   |   |   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                  |                                                     |                                                 | H                                                                                             | 12.95 ± 0.5 mm       |                   |                                   |                                  |                                     |                        |         |         |         |         |      |                              |    |    |    |    |    |    |    |    |                                     |   |   |   |   |   |   |   |   |
| 2. 電氣性能檢測項目:<br>ELECTRICAL REQUIREMENTS:                                                                                                                                                                                                                                                                                                                                                                                                             |                                  |                                                     |                                                 | 測試儀器<br>TEST INSTRUMENTS                                                                      |                      |                   |                                   |                                  |                                     |                        |         |         |         |         |      |                              |    |    |    |    |    |    |    |    |                                     |   |   |   |   |   |   |   |   |
| <div><input type="checkbox"/> L</div>                                                                                                                                                                                                                                                                                                                                                                                                                |                                  |                                                     |                                                 | 1. Q-METER:<br>○ HP 4342A    ○ MQ-172                                                         |                      |                   |                                   |                                  |                                     |                        |         |         |         |         |      |                              |    |    |    |    |    |    |    |    |                                     |   |   |   |   |   |   |   |   |
| <div><input type="checkbox"/> Q</div>                                                                                                                                                                                                                                                                                                                                                                                                                |                                  |                                                     |                                                 | 2. L.C.R. METER:<br>○ HP 4284A                                                                |                      |                   |                                   |                                  |                                     |                        |         |         |         |         |      |                              |    |    |    |    |    |    |    |    |                                     |   |   |   |   |   |   |   |   |
| <div><input checked="" type="checkbox"/> Z</div> <div>Z1= 20Ω MIN    KHZ 25 MHZ    Z2=45Ω MIN    KHZ 100 MHZ</div> <div>Z3=    /    KHZ MHZ    Z4=    /    KHZ MHZ</div>                                                                                                                                                                                                                                                                             |                                  |                                                     |                                                 | 3. IMPEDANCE ANALYZER:<br>○ HP 4396B    ○ HP 4191A    ØE4991A<br>Ø Agilent 16194A-TESTFIXTURE |                      |                   |                                   |                                  |                                     |                        |         |         |         |         |      |                              |    |    |    |    |    |    |    |    |                                     |   |   |   |   |   |   |   |   |
| 溫度<br>TEMP                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                  | ℃                                                   | 濕度<br>HUMIDITY                                  | 4. L-METER:<br>○ TH 2817A                                                                     |                      |                   |                                   |                                  |                                     |                        |         |         |         |         |      |                              |    |    |    |    |    |    |    |    |                                     |   |   |   |   |   |   |   |   |
| 線組<br>WINDING                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                  | Φ0.5x0.5TSx100L(mm)                                 |                                                 | 5. DIGITAL MINI-OHMMETER:<br>○ VP2941A                                                        |                      |                   |                                   |                                  |                                     |                        |         |         |         |         |      |                              |    |    |    |    |    |    |    |    |                                     |   |   |   |   |   |   |   |   |
| 3. 外觀標準: 依下表對照檢索:<br>THE LIMIT OF BREAKAGE: CHECKED BELOW:                                                                                                                                                                                                                                                                                                                                                                                           |                                  |                                                     |                                                 |                                                                                               |                      |                   |                                   |                                  |                                     |                        |         |         |         |         |      |                              |    |    |    |    |    |    |    |    |                                     |   |   |   |   |   |   |   |   |
| <table><tr><td>OD<br/>(mm)</td><td>0~5</td><td>5.1~10</td><td>10.1~15</td><td>15.1~20</td><td>20.1~25</td><td>25.1~30</td><td>30.1~35</td><td>35以上</td></tr><tr><td>缺陷面积<br/>Defect area<br/>(mm²)</td><td>≤1</td><td>≤2</td><td>≤3</td><td>≤4</td><td>≤5</td><td>≤6</td><td>≤7</td><td>≤8</td></tr><tr><td>缺陷个数<br/>Number of<br/>defects<br/>(≡)</td><td>1</td><td>2</td><td>3</td><td>3</td><td>3</td><td>3</td><td>2</td><td>2</td></tr></table> |                                  |                                                     |                                                 |                                                                                               |                      |                   | OD<br>(mm)                        | 0~5                              | 5.1~10                              | 10.1~15                | 15.1~20 | 20.1~25 | 25.1~30 | 30.1~35 | 35以上 | 缺陷面积<br>Defect area<br>(mm²) | ≤1 | ≤2 | ≤3 | ≤4 | ≤5 | ≤6 | ≤7 | ≤8 | 缺陷个数<br>Number of<br>defects<br>(≡) | 1 | 2 | 3 | 3 | 3 | 3 | 2 | 2 |
| OD<br>(mm)                                                                                                                                                                                                                                                                                                                                                                                                                                           | 0~5                              | 5.1~10                                              | 10.1~15                                         | 15.1~20                                                                                       | 20.1~25              | 25.1~30           | 30.1~35                           | 35以上                             |                                     |                        |         |         |         |         |      |                              |    |    |    |    |    |    |    |    |                                     |   |   |   |   |   |   |   |   |
| 缺陷面积<br>Defect area<br>(mm²)                                                                                                                                                                                                                                                                                                                                                                                                                         | ≤1                               | ≤2                                                  | ≤3                                              | ≤4                                                                                            | ≤5                   | ≤6                | ≤7                                | ≤8                               |                                     |                        |         |         |         |         |      |                              |    |    |    |    |    |    |    |    |                                     |   |   |   |   |   |   |   |   |
| 缺陷个数<br>Number of<br>defects<br>(≡)                                                                                                                                                                                                                                                                                                                                                                                                                  | 1                                | 2                                                   | 3                                               | 3                                                                                             | 3                    | 3                 | 2                                 | 2                                |                                     |                        |         |         |         |         |      |                              |    |    |    |    |    |    |    |    |                                     |   |   |   |   |   |   |   |   |
| 4.材質特性 MATERIAL CHARACTERISTICS                                                                                                                                                                                                                                                                                                                                                                                                                      |                                  |                                                     |                                                 |                                                                                               |                      |                   |                                   |                                  |                                     |                        |         |         |         |         |      |                              |    |    |    |    |    |    |    |    |                                     |   |   |   |   |   |   |   |   |
| 材料<br>牌號<br>Mate-<br>rial                                                                                                                                                                                                                                                                                                                                                                                                                            | 初始磁導率<br>Initial<br>Permeability | 比損耗因子<br>Relative<br>Loss Factor                    | 比溫度系數<br>Relative<br>Temperature<br>Coefficient | 飽和磁通密度<br>Saturation<br>Magnetic Flux<br>Density                                              | 剩磁<br>Reman-<br>ence | 矯頑力<br>Coercivity | 居裏溫度<br>Curie<br>Tempera-<br>ture | 電阻率<br>Electrical<br>Resistivity | 減弱因素<br>Disaccommodation            | 密度<br>Density          |         |         |         |         |      |                              |    |    |    |    |    |    |    |    |                                     |   |   |   |   |   |   |   |   |
| Unit<br>symbol                                                                                                                                                                                                                                                                                                                                                                                                                                       | μ <sub>i</sub><br>±25%           | Tan δ / μ <sub>i</sub> (10KHZ)<br>×10 <sup>-6</sup> | α μ <sub>i</sub> γ<br>×10 <sup>-6</sup>         | B <sub>s</sub><br>(MT)                                                                        | Br<br>(MT)           | HC<br>(A/m)       | T <sub>c</sub><br>(℃)             | ρ<br>(Ω · m)                     | D <sub>F</sub><br>×10 <sup>-6</sup> | d<br>g/cm <sup>3</sup> |         |         |         |         |      |                              |    |    |    |    |    |    |    |    |                                     |   |   |   |   |   |   |   |   |
| R7K                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 7000                             | <6.5                                                | -0.5~2.0                                        | 420                                                                                           | 100                  | 7.5               | 120                               | 0.3                              | < 2.5                               | 4.9x10 <sup>3</sup>    |         |         |         |         |      |                              |    |    |    |    |    |    |    |    |                                     |   |   |   |   |   |   |   |   |

檢驗數據  
INSPECTION DATA

|                                                 |                                  |       |                         |       |                                                                                                                                                                                                                                                                                                                                                                                                             |                |       |                 |       |       |       |       |
|-------------------------------------------------|----------------------------------|-------|-------------------------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------|-----------------|-------|-------|-------|-------|
| 客戶名稱<br>CUSTOMER                                |                                  |       |                         |       | 日期<br>DATE                                                                                                                                                                                                                                                                                                                                                                                                  | 2025.05.12     |       | 數量<br>QUANTITY  | 5PCS  |       |       |       |
| 編號<br>SERIAL NO.                                |                                  |       |                         |       | <div>形狀尺寸(單位/毫米):<br/>SHAPE &amp; DIMENSION(unit/mm):</div> <div>實物圖:<br/>The Sample::</div> <div>外殼尺寸:<br/></div> <div>磁芯尺寸:<br/></div> <div></div> |                |       |                 |       |       |       |       |
| 規格<br>ITEM                                      | R7K HY28A2024-0A2                |       |                         |       |                                                                                                                                                                                                                                                                                                                                                                                                             |                |       |                 |       |       |       |       |
| 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 ITEM                                 | 電氣性能<br>ELECTRIC CHARACTERISTICS |       |                         |       | 尺寸(單位:毫米)<br>DIMENSION(unit:mm)                                                                                                                                                                                                                                                                                                                                                                             |                |       |                 |       |       |       |       |
|                                                 | Z1(Ω)                            | Z2(Ω) | Z3(Ω)                   | Z4(Ω) | A                                                                                                                                                                                                                                                                                                                                                                                                           | B              | C     | D               | E     | F     | G     | H     |
|                                                 | 20                               | 45    |                         |       | 29                                                                                                                                                                                                                                                                                                                                                                                                          | 30             | 13    | 32              | 26.0  | 29.4  | 13.0  | 12.95 |
| +                                               | /                                | /     |                         |       | 1.0                                                                                                                                                                                                                                                                                                                                                                                                         | 1.0            | 0.8   | 1.0             | 0.8   | 0.8   | 0.5   | 0.5   |
| -                                               | 0                                | 0     |                         |       | 1.0                                                                                                                                                                                                                                                                                                                                                                                                         | 1.0            | 0.8   | 1.0             | 0.8   | 0.8   | 0.5   | 0.5   |
| 1                                               | 32.2                             | 66.2  |                         |       | 29.33                                                                                                                                                                                                                                                                                                                                                                                                       | 30.10          | 13.79 | 32.28           | 26.05 | 29.35 | 13.11 | 12.89 |
| 2                                               | 33.0                             | 65.1  |                         |       | 29.31                                                                                                                                                                                                                                                                                                                                                                                                       | 30.09          | 13.61 | 32.32           | 26.12 | 29.42 | 12.85 | 12.95 |
| 3                                               | 31.5                             | 64.5  |                         |       | 28.85                                                                                                                                                                                                                                                                                                                                                                                                       | 30.12          | 13.57 | 32.32           | 25.94 | 29.44 | 13.01 | 13.02 |
| 4                                               | 30.6                             | 64.4  |                         |       | 28.89                                                                                                                                                                                                                                                                                                                                                                                                       | 30.00          | 13.72 | 32.45           | 25.97 | 29.38 | 13.03 | 13.10 |
| 5                                               | 30.5                             | 65.2  |                         |       | 28.86                                                                                                                                                                                                                                                                                                                                                                                                       | 29.95          | 13.66 | 32.45           | 25.85 | 29.36 | 12.94 | 12.91 |
| 6                                               | 31.2                             | 66.0  |                         |       | 29.33                                                                                                                                                                                                                                                                                                                                                                                                       | 29.97          | 13.69 | 32.40           | 26.01 | 29.30 | 12.97 | 12.88 |
| 7                                               | 31.0                             | 65.0  |                         |       | 29.30                                                                                                                                                                                                                                                                                                                                                                                                       | 29.99          | 13.67 | 32.42           | 26.13 | 29.45 | 13.04 | 13.07 |
| 8                                               | 32.0                             | 64.1  |                         |       | 29.38                                                                                                                                                                                                                                                                                                                                                                                                       | 29.94          | 13.68 | 32.30           | 26.08 | 29.40 | 13.10 | 12.90 |
| 9                                               | 31.4                             | 64.2  |                         |       | 28.90                                                                                                                                                                                                                                                                                                                                                                                                       | 30.12          | 13.59 | 32.29           | 25.99 | 29.49 | 12.88 | 13.09 |
| 10                                              | 32.4                             | 65.8  |                         |       | 28.86                                                                                                                                                                                                                                                                                                                                                                                                       | 30.15          | 13.74 | 32.43           | 25.93 | 29.53 | 12.85 | 12.95 |
| $\bar{X}$                                       | 31.58                            | 65.05 |                         |       | 29.10                                                                                                                                                                                                                                                                                                                                                                                                       | 30.04          | 13.67 | 32.36           | 26.00 | 29.41 | 12.97 | 12.97 |
| Y/N                                             | Y                                | Y     |                         |       | Y                                                                                                                                                                                                                                                                                                                                                                                                           | Y              | Y     | 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 |       |       |       |       |
|                                                 |                                  |       |                         |       | 李光赫                                                                                                                                                                                                                                                                                                                                                                                                         |                | 方煜镗   |                 | 梁琮    |       |       |       |

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

