

# 規格承認書

## SPECIFICATIONS FOR APPROVAL

|                      |                                 |
|----------------------|---------------------------------|
| 客戶名稱<br>CUSTOMER     | 立創商城                            |
| 規格敘述<br>DESCRIPTION  | EMI Capacitors Class Y2, 300VAC |
| 鎔谷料號<br>CHIEFCON P/N | YB152K30LAXLX                   |
| 客戶料號<br>CUSTOMER P/N |                                 |
| 承認編號<br>APPROVAL NO  |                                 |
| 發行日期<br>ISSUED DATE  | 2023.09.06                      |
| 版次<br>VERSION        | 1.0                             |

### 鎔谷電子有限公司 CHIEFCON ELECTRONICS CO.,LTD.

台灣：桃園市八德區和成路 23 號

NO.23, HER-CHENG RD,BA-DE DISTRIC CITY TAO YUAN CITY, 334 TAIWAN.R.O.C

電話 TEL：0769-83919069 +886-3-3623092&3641144 傳真 FAX：+886-3-3623273

Website：www.chiefcon.com Email：chiefcon@chiefcon.com

| 核准 APPROVAL BY  | 審核 CHECKED BY   |   | 製作 PREPARED BY  |  |  |
|---|---|---|---|--|--|
|  |  |  |  |  |  |
| 客戶承認欄 CUSTOMER APPROVAL   |   |   |   |  |  |
|   |   |   |   |  |  |

⊙ This specification will be invalidated assuming that it is not accepted when it is not returned within sixth months from the date of issue. 此承認書若未在發行日期起六個月內簽回，將視為無效。

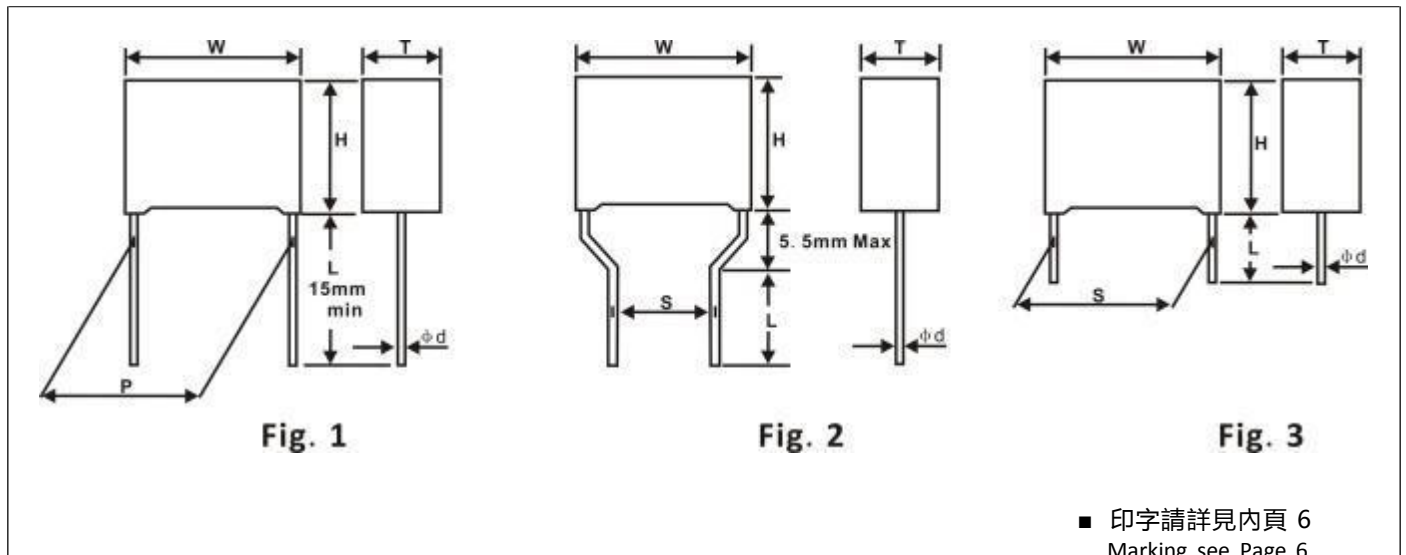
## DOCUMENT HISTORY

## APPROVAL NO.

| 日期         | 版次  | 說明       | 審核  | 確認 | 製表  |
|------------|-----|----------|-----|----|-----|
| 2023-08-06 | 1.0 | 承認書首次發行。 | 莊育璋 | 刘斌 | 謝柳慧 |
|            |     |          |     |    |     |
|            |     |          |     |    |     |
|            |     |          |     |    |     |
|            |     |          |     |    |     |
|            |     |          |     |    |     |
|            |     |          |     |    |     |
|            |     |          |     |    |     |
|            |     |          |     |    |     |
|            |     |          |     |    |     |

|                      |      |
|----------------------|------|
| <b>SPECIFICATION</b> |      |
| 客戶名稱<br>CUSTOMER     | 立创商城 |
| 型號<br>TYPE           | Y2X1 |

產品尺寸圖 PRODUCT DIMENSIONS



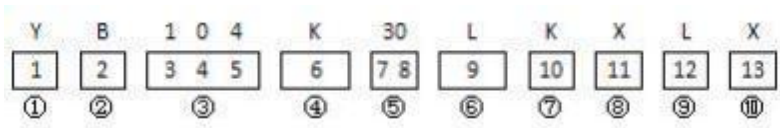
| 產品型號<br>P/N   | 容值 CAP.<br>(uF) | 標志<br>Symbol | 公差<br>Tol. % | 電壓<br>R.V. (VAC) | 尺寸毫米為單位<br>Dimensions in mm |             |             |              |              |                |             | 圖示<br>Fig. | 備注<br>Notes |
|---------------|-----------------|--------------|--------------|------------------|-----------------------------|-------------|-------------|--------------|--------------|----------------|-------------|------------|-------------|
|               |                 |              |              |                  | 寬 W<br>±1.0                 | 高 H<br>±1.0 | 厚 T<br>±1.0 | 腳距 P<br>±1.0 | 腳距 S<br>±1.0 | 線徑 φd<br>±0.05 | 腳長 L<br>Min |            |             |
| YB152K30LAXLX | 0.0015          | 152          | 20           | 300              | 13.0                        | 11.0        | 5.0         | 10           | NA           | 0.6            | 15.0        | 1          |             |
|               |                 |              |              |                  |                             |             |             |              |              |                |             |            |             |
|               |                 |              |              |                  |                             |             |             |              |              |                |             |            |             |
|               |                 |              |              |                  |                             |             |             |              |              |                |             |            |             |
|               |                 |              |              |                  |                             |             |             |              |              |                |             |            |             |
|               |                 |              |              |                  |                             |             |             |              |              |                |             |            |             |
|               |                 |              |              |                  |                             |             |             |              |              |                |             |            |             |
|               |                 |              |              |                  |                             |             |             |              |              |                |             |            |             |
|               |                 |              |              |                  |                             |             |             |              |              |                |             |            |             |
|               |                 |              |              |                  |                             |             |             |              |              |                |             |            |             |
|               |                 |              |              |                  |                             |             |             |              |              |                |             |            |             |
|               |                 |              |              |                  |                             |             |             |              |              |                |             |            |             |
|               |                 |              |              |                  |                             |             |             |              |              |                |             |            |             |
|               |                 |              |              |                  |                             |             |             |              |              |                |             |            |             |
|               |                 |              |              |                  |                             |             |             |              |              |                |             |            |             |
|               |                 |              |              |                  |                             |             |             |              |              |                |             |            |             |
|               |                 |              |              |                  |                             |             |             |              |              |                |             |            |             |
|               |                 |              |              |                  |                             |             |             |              |              |                |             |            |             |
|               |                 |              |              |                  |                             |             |             |              |              |                |             |            |             |
|               |                 |              |              |                  |                             |             |             |              |              |                |             |            |             |

產品編碼對照表 PRODUCT CODE COMPARATIVE TABLE

產品編碼 Product coding

型號:

TYPE: CKX



○ 1 產品型號或類別 Type or class of capacitor

|                        |     |     |     |         |         |         |     |     |         |     |        |         |    |    |
|------------------------|-----|-----|-----|---------|---------|---------|-----|-----|---------|-----|--------|---------|----|----|
| 型號或類別<br>Type or class | PEI | PPN | MPE | MPP     | DMP     | PMP     | HMP | X1  | X2      | MEM | MPS(S) | PSA/PSR | Y2 | Y1 |
| 代碼 Code                | A   | B   | C   | D       | E       | F       | H   | I   | J       | K   | W      | 6       | Y  | L  |
| 型號或類別<br>Type or class | IC  | MME | PMD | MPA/MPT | MEA/MET | MMP(DM) | X+Y | PPI | PMM(FM) | PPS | PPT    |         |    |    |
| 代碼 Code                | Q   | T   | S   | 3       | 4       | U       | Z   | 5   | 2       | P   | 8      |         |    |    |

○ 2 外形類別或其他 Shape category or other

|                |    |    |    |      |      |       |       |        |         |             |      |      |      |              |
|----------------|----|----|----|------|------|-------|-------|--------|---------|-------------|------|------|------|--------------|
| 描述<br>Describe | 含浸 | 盒裝 | 粉包 | 軸向扁形 | 軸向圓形 | 立式圓柱形 | 盒裝降壓品 | 盒裝雙 85 | 盒裝 IGBT | 盒裝 SNUBBE R | 盒裝諧振 | 盒裝無鹵 | 粉包無鹵 | 盒裝 AEC-Q 200 |
| 代碼 Code        | E  | B  | P  | F    | C    | D     | S     | T      | G       | N           | R    | H    | J    | K            |

○ 3 產品容量代碼 Capacitance code ( EIA Code)

| 代碼 Code | 容量換算 Capacitance |       |          | 代碼 Code | 容量換算 Capacitance |       |        | 代碼 Code | 容量換算 Capacitance |          |      |
|---------|------------------|-------|----------|---------|------------------|-------|--------|---------|------------------|----------|------|
| 101     | 100pF            | 0.1nF | 0.0001uF | 103     | 10,000pF         | 10nF  | 0.01uF | 105     | 1,000,000pF      | 1,000nF  | 1uF  |
| 102     | 1,000pF          | 1nF   | 0.001uF  | 104     | 100,000pF        | 100nF | 0.1uF  | 106     | 10,000,000pF     | 10,000nF | 10uF |

○ 4 產品容量誤差 Tolerance ( EIA Code)

|         |     |     |     |     |      |      |         |         |          |          |         |
|---------|-----|-----|-----|-----|------|------|---------|---------|----------|----------|---------|
| 誤差 Tol. | ±1% | ±2% | ±3% | ±5% | ±10% | ±20% | -10%~0% | 0%~+10% | -5%~+10% | -10%~+5% | 0%~+20% |
| 代碼 Code | F   | G   | I   | J   | K    | M    | L       | P       | U        | V        | W       |

○ 5 產品額定電壓 Rated Voltage

|            |    |    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |      |      |      |      |      |
|------------|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|
| 電壓 Voltage | 50 | 63 | 100 | 125 | 200 | 250 | 275 | 300 | 310 | 330 | 400 | 440 | 450 | 630 | 700 | 800 | 1000 | 1250 | 1600 | 2000 | 2750 |
| 代碼 Code    | 05 | 06 | 10  | 12  | 20  | 25  | 27  | 30  | 31  | 33  | 40  | 44  | 45  | 63  | 70  | 80  | 1K   | 1A   | 1B   | 2K   | 3K   |

○ 6 產品引線成型 Lead Configuration

|                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 腳型<br>Lead Type |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 代碼 Code         | L | M | N | B | C | D | E | F | G | H | K | T | U | W | R | S |

備注：電線及其它腳型用 "X" Note: The wire and the other foot type with the "X"

產品編碼對照表 PRODUCT CODE COMPARATIVE TABLE

型號:

產品編碼 Product coding

TYPE: CKX

○7產品本體腳距 Lead Space

|                 |      |      |      |      |      |      |      |      |      |     |      |      |         |         |      |      |      |
|-----------------|------|------|------|------|------|------|------|------|------|-----|------|------|---------|---------|------|------|------|
| 本體腳距 Lead Space | 52.5 | 55.0 | 57.5 | 95.0 | 5.0  | 31.0 | 6.0  | 7.0  | 7.5  | 10  | 10.5 | 12.5 | 14.7    | 15.0    | 17.5 | 20.0 | 22.5 |
| 代碼 Code         | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | A   | B    | C    | D       | E       | F    | G    | H    |
| 本體腳距 Lead Space | 25.0 | 27.5 | 30.0 | 31.5 | 32.5 | 35.0 | 37.5 | 47.5 | 51.5 | 9.5 | 12.0 | 13.5 | 42/42.5 | 45/46.0 | 22.0 | 28.5 |      |
| 代碼 Code         | J    | K    | L    | M    | N    | P    | Q    | R    | S    | T   | U    | V    | W       | X       | Y    | Z    |      |

備注：不常用腳距用“Z”·一字型及電線型用“0” Note: not a common pin pitch using "Z", a font and wire type using "0"

○8產品彎腳腳距或副腳腳距 Lead Forming or Vice- Lead(P1) Pitch

|              |   |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |        |
|--------------|---|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--------|
| 彎腳腳距 Forming | 5 | 7.5 | 10.0 | 10.2 | 12.5 | 12.7 | 15.0 | 17.5 | 20.0 | 20.3 | 22.5 | 25.0 | 25.4 | 27.5 | 30.0 | 35.0 | 37.5 | Others |
| 代碼 Code      | A | H   | B    | J    | G    | Q    | C    | M    | D    | N    | W    | E    | K    | F    | U    | V    | Z    | X      |

備注：X用于電線及○6引腳成型“L,B,U” Note: X for wires and ○6 pin forming the "L, B, U"

○9產品引線長度 Lead Length (unit: mm)

|           |      |      |     |      |      |     |     |     |      |      |      |        |      |
|-----------|------|------|-----|------|------|-----|-----|-----|------|------|------|--------|------|
| 長度 Length | 3.0  | 3.5  | 4.0 | 4.5  | 5.0  | 6.0 | 7.0 | 8.0 | 9.0  | 10.0 | 20.0 | 25.0   | 30.0 |
| 代碼 Code   | 1    | 2    | 3   | 4    | 5    | 6   | 7   | 8   | 9    | A    | B    | C      | D    |
| 長度 Length | 40.0 | 27.0 | 3.2 | 47.0 | 13.0 | 3.4 | 2.5 | 3.6 | 11.0 | 35.0 | 7.5  | 33.0   | 45.0 |
| 代碼 Code   | E    | F    | G   | H    | J    | K   | M   | N   | P    | Q    | R    | S      | U    |
| 長度 Length | 4.7  | 3.8  | 38  | 15   | 5.5  |     |     |     |      |      |      | Taping | N/A  |
| 代碼 Code   | W    | X    | Y   | Z    | I    |     |     |     |      |      |      | T      | L    |

備注：L用于電線及○6引腳成型“L”;V用于不常用腳長 Note: L for wire and ○6 pin forming the "L", Use V for uncommon foot length

⑩輔助碼 Accessories Yards

| NO. | 說明 Descriptions   |
|-----|---|
| 1   | 每個規格第一編輯時用“X” Each specification first edit with "X"  |
| 2   | 同種規格外觀及尺寸有差異時用“1·2·3·...”進行區分<br>The same specifications appearance and size differ with non-simultaneous 1, 2, 3 to distinguish                            |
| 3   | 同種規格加工方式不同時(電性)用“A·B·C·...”進行區分<br>The same specification is not the same as the processing method (electrical characteristics) with A, B, C to distinguish |

產品規格說明  
PRODUCT SPECIFICATIONS

型號: CKX  
TYPE:

| NO.   | 項目 ITEM   | 說明 DESCRIPTIONS   |
|---|---|---|
| 1   | 承認範圍<br>SCOPE   | 本規格適用於鋁箔之要求<br>This specifications cover the requirements of CKX<br>金屬化聚丙烯薄膜<br>Metallized Polypropylene Film<br>交流電容器 (抑制電源電磁干擾用固定電容器/等級-Y2X1)<br>AC Capacitor ( Interference Suppressors Class- Y2 X1 ) . |
| 2   | 各測量皆於標準大氣下進行 <b>STANDARD ATMOSPHERIC CONDITIONS FOR MAKING MEASUREMENTS</b> |   |
| 2.1   | 環境溫度 AMBIENT TEMPERATURE  | 15 °C 至 35 °C (如對結果有任何疑問, 該測量環境溫度應為+20 ± 5 °C之間)<br>15 °C to 35 °C ( If there is any doubt on the results, the measurements shall be made at +20 ± 5 °C)  |
| 2.2   | 相對溼度 RELATIVE HUMIDITY( R. H.)  | 45%至 75% (如對結果有任何疑問, 該測量相對溼度應為 60% to 70%之間)<br>45% to 75% ( If there is any doubt on the results, the measurements shall be made at 60% to 70%)  |
| 2.3   | 大氣壓力 AIR PRESSURE   | 86 千帕至 106 千帕之<br>86 kpa to 106 kpa   |
| 2.4   | 工作溫度範圍<br>OPERATING TEMPERATURE RANGE                                       | 於 -40 °C 至+110°C間, 電容可在額定電壓下持續運作<br>- 40 °C to + 110 °C for which the capacitor can be operated continuously at rated voltage.  |
| 3   | <b>結構 CONSTRUCTION</b>  |   |
| 3.1   | 電介質 DIELECTRIC  | 金屬化聚丙烯薄膜 Metallized Polypropylene Film  |
| 3.2   | 噴金屬 METAL SPRAY   | 特殊焊料 Special Solder   |
| 3.3   | 導線 LEAD WIRE  | 線徑 0.6 mm LEAD WIRE DIAMETER 0.6 mm   |
| 3.4   | 環氧樹脂 EPOXY RESIN  | 耐燃等級 UL 94V-0   |
| 3.5   | 塑料外殼 PLASTIC CASE   | 耐燃等級 UL 94V-0   |
|                                |   |   |
| 4   | <b>打印 MARKING</b>   |   |
| 4.1   | 製造商標誌 MANUFACTURER'S SYMBOL   |    |
| 4.2   | 型號或材質 TYPE OR MATERIAL  | “CKX”代表“CKX”類型<br>“CKX” stands for “CKX” type   |
| 4.3   | 電容類別 CAPACITOR CLASS  | “Y2X1” 代表“Y2X1”等級<br>“Y2X1” stands for “Y2X1” class   |
| 4.4   | 靜電容量 NOMINAL CAPACITANCE  | 容量用 EIA 三碼表示<br>Capacitance Expressed in 3 - digit ( EIA ) code.  |
| 4.5   | 容量容許差值 TOLERANCE  | J (±5%), K(±10%), M(±20%)   |
| 4.6   | 額定電壓 RATED VOLTAGE  | 交流電壓<br>300V in VAC rating. (50/60Hz)   |
| 4.7   | 電容氣候類別 / 阻燃等級 CLIMATIC CATEGORY   | 40/ 110/56/ B or GLFB   |
| 4.8   | 國際認證 APPROVAL MARKS   | c ULus / ENEC /CQC  |
| 4.9   | 製造番號 MANUFACTURE CODE   |   |
|  <p>範例 example</p> <p>≥ 10</p> |   |   |

| 5 電氣特性 ELECTRICAL CHARACTERISTICS |                                      |  |  |  |
|-----------------------------------|--------------------------------------|--|--|--|
| NO.                               | 項目 ITEM                              |  | 說明 DESCRIPTIONS  |  |
| 5.1                               | 耐壓 (TV)<br>Withstand Voltage         | 端子之間<br>Between Terminals                | 應無異常<br>Shall be no abnormality  | 施加電壓 2,000VAC/ 2 秒或是 4,000VDC/ 2 秒。<br>Apply 2,000V (AC) for 2 sec or 4,000V ( DC) for 2 sec.  |
|                                   |                                      | 端子與外殼之間<br>Between Terminals & Enclosure | 應無異常<br>Shall be no abnormality  | 2 倍額定電壓+1,500VAC , 測試 2 到 5 秒<br>最小值 2,000VAC<br>Apply 2*Ur+1, 500VAC for 2 to 5 sec.<br>Min. 2,000VAC   |
| 5.2                               | 介質損耗 (DF)<br>Dissipation Factor      |  | 於 1KHz 時 $\leq 0.001(0.1\%)$<br>$\leq 0.001(0.1\%)$ at 1 KHz   | 測量頻率: $\pm 2\%$ ;測量電壓: $\leq 1V_{rms}$<br>Measuring Frequency: $\pm 2\%$<br>Measuring Voltage: $\leq 1 V_{rms}..$  |
| 5.3                               | 容量 (CAP)<br>Capacitance              |  | 偏差值如標示(於 $+20 \pm 5^\circ C$ ) 。<br>Within the tolerance specified<br>(at $+20 \pm 5^\circ C$ ).   | 測量頻率: $\pm 2\%$ ;測量電壓: $\leq 1 V_{rms}$<br>Measuring Frequency: $\pm 2\%$<br>Measuring Voltage: $\leq 1 V_{rms}..$   |
| 5.4                               | 絕緣電阻 (I.R.)<br>Insulation Resistance |  | 容值 $\leq 0.33\mu F$ 時, 絕緣電阻 $\geq 15,000M\Omega$<br>$IR \geq 15,000 Mohm (C \leq 0.33\mu F)$<br><br>容值 $> 0.33\mu F$ 時, 絕緣電阻 $\geq 5,000M\Omega * \mu F / C$<br>$IR \geq 5,000 Mohm * \mu F / C (C > 0.33\mu F)$ | VR=500VAC , 施加電壓 : $500 \pm 50VDC$<br>250VAC $\equiv$ VR<500VAC , 施加電壓 :<br>100 $\pm$ 15VDC<br>充電時間 60 $\pm$ 5 秒。<br>VR=500VAC , Vt=500 VDC<br><br>250VAC $\equiv$ VR<500VAC , Vt=500 VDC<br>Charge Time:60 $\pm$ 5 sec.               |
| 5.5                               | 焊料附著性<br>Soldering Property          |  | 焊料覆蓋面積應超過導線表面 圓周 90%。<br>More than 90% of circumferential<br>surface of lead wire shall be covered with new<br>solder.   | 焊接溫度為: $+235 \pm 5^\circ C$<br>浸焊時間為: 2 $\pm$ 0.5 秒<br>Soldering temperature: $+235 \pm 5^\circ C$<br>Immersion duration: 2 $\pm$ 0.5 sec.   |
| 6 機械特性 MECHANICAL CHARACTERISTICS |                                      |  |  |  |
| 6.1                               | 端子強度<br>Terminal Strength            | 引張強度<br>Tensile Strength                 | 應無異常 。<br>Shall be no abnormality  | 沿著軸向和引出方向, 施加 1 公斤力量 ,<br>保持 10 $\pm$ 1 秒。<br>Apply 1.0Kg for 10 $\pm$ 1 sec. to the terminal in<br>the axial direction and acting in a direction<br>away from the body.   |
|                                   |                                      | 彎曲強度<br>Bending Strength                 | 應無異常。<br>Shall be no abnormality   | 在引線末端施加 0.5 公斤, 把引線彎曲 90<br>度, 回復到起始點, 再往反方向彎曲 90 度,<br>在回復到起始點, 每次需維持 2- 3 秒。<br>Apply 0.5 Kg for 2 cycles. Each cycle includes:<br>90°once, return to its initial position for 2- 3<br>sec. and then to the opposite direction once. |

| 7 耐久特性 ENDURANCE CHARACTERISTICS |                              |  |   |   |
|----------------------------------|------------------------------|--|---|---|
| NO.                              | 項目 ITEM                      | 說明 DESCRIPTIONS                          |   |   |
| 7.1                              | 溫度變化循環<br>Temperature Cycle  | 外觀<br>Appearance                         | 應當無顯著變化<br>Shall be no remarkable change                  | 共 5 次溫度循環測試，循環條件：<br>1. +20 ± 2 °C 持續 3 分鐘<br>2. -40 ± 3 °C 持續 30 分鐘<br>3. +20 ± 2 °C 持續 3 分鐘<br>4. +110 ± 3 °C 持續 30 分鐘<br>5. +20 ± 2 °C 持續 3 分鐘<br>試驗後放置於室內 1.5 ± 0.5 小時後再進行量測。<br>Test Temperature Cycle: Total 5 cycles .<br>Each cycle includes<br>1. 20 ± 2 °C for 3 min.<br>2. -40 ± 3 °C for 30 min.<br>3. +20 ± 2 °C for 3 min.<br>4. +110 ± 3 °C for 30 min.<br>5. +20 ± 2 °C for 3 min.<br>After test, allow it stay alone for 1.5 ± 0.5 Hrs.<br>at ordinary condition before making measurements. |
|                                  |                              | 耐壓<br>Withstand Voltage                  | 應滿足 NO.5. 1<br>shall satisfy NO.5. 1                      |   |
|                                  |                              | 容值變化率 (ΔC/ C)<br>Capacitance Change Rate | 變化率小於 ± 5%<br>Within ± 5 % of the value before test       |   |
|                                  |                              | 介質損耗<br>Dissipation Factor               | 於 1KHz 時: 最大值為 0.002 (0.2%)<br>@ 1KHz: 0.002 (0.2%) max.  |   |
|                                  |                              | 絕緣電阻 (I. R.)<br>Insulation Resistance    | ≥ 50%的限制值在 NO.5 .4<br>≥ 50% of the limit value of NO.5 .4 |   |
| 7.2                              | 耐乾熱試驗<br>Dry Heat Resistance | 外觀<br>Appearance                         | 應當無顯著變化<br>Shall be no remarkable change                  | 試驗溫度: +110 ± 2 °C<br>測試時間: 16 + 1/-0 小時<br>Test Temperature: +110 ± 2 °C<br>Test Duration: 16 + 1/-0 hrs.   |
|                                  |                              | 耐壓<br>Withstand Voltage                  | 應滿足 NO.5. 1<br>Shall satisfy NO.5. 1                      |   |
|                                  |                              | 容值變化率 (ΔC/ C)<br>Capacitance Change Rate | 變化率小於 ± 5%<br>Within ± 5 % of the value before test       |   |
|                                  |                              | 介質損耗<br>Dissipation Factor               | 於 1KHz 時: 最大值為 0.002 (0.2%)<br>@ 1KHz: 0.002 (0.2%) max.  |   |
|                                  |                              | 絕緣電阻 (I. R.)<br>Insulation Resistance    | ≥ 50%的限制值在 NO.5 .4<br>≥ 50% of the limit value of NO.5 .4 |   |
| 7.3                              | 耐乾寒試驗<br>Cold Resistance     | 外觀<br>Appearance                         | 應當無顯著變化<br>Shall be no remarkable change                  | 試驗溫度: -40 ± 3 °C<br>測試時間: 2 ± 1 小時<br>Test Temperature: -40 ± 3 °C<br>Test Duration: 2 ± 1 hrs.   |
|                                  |                              | 耐壓<br>Withstand Voltage                  | 應滿足 NO.5. 1<br>Shall satisfy NO.5. 1                      |   |
|                                  |                              | 容值變化率 (ΔC/ C)<br>Capacitance Change Rate | 變化率小於 ± 5%<br>Within ± 5 % of the value before test       |   |
|                                  |                              | 介質損耗<br>Dissipation Factor               | 於 1KHz 時: 最大值為 0.002 (0.2%)<br>@ 1KHz: 0.002 (0.2%) max.  |   |
|                                  |                              | 絕緣電阻 (I. R.)<br>Insulation Resistance    | ≥ 50%的限制值在 NO.5 .4<br>≥ 50% of the limit value of NO.5 .4 |   |



產品規格說明  
PRODUCT SPECIFICATIONS




型號: CKX  
TYPE:

| NO. | 項目 ITEM  | 說明 DESCRIPTIONS  |
|-----|--|--|
| 7.4 | 外觀<br>Appearance                                   | 應當無顯著變化<br>Shall be no remarkable change   |
|     | 耐壓<br>Withstand Voltage                            | 應滿足 NO.5. 1<br>Shall satisfy NO.5. 1   |
|     | 容值變化率 ( $\Delta C/ C$ )<br>Capacitance Change Rate | 變化率小於 $\pm 5\%$<br>Within $\pm 5\%$ of the value before test                           |
|     | 介質損耗<br>Dissipation Factor                         | 於 1KHz 時: 最大值為 0.002 (0.2%)<br>@ 1KHz: 0.002 (0.2%) max.                               |
|     | 絕緣電阻 (I. R.)<br>Insulation Resistance              | $\geq 50\%$ 的限制值在 NO.5 .4<br>$\geq 50\%$ of the limit value of NO.5 .4                 |
| 7.5 | 外觀<br>Appearance                                   | 應無機械性損傷<br>Shall be no mechanical damage.  |
|     | 振動試驗<br>Vibration Resistance                       | 不得為短路或開路連接。<br>連接點應穩定。<br>The connection shall be stable.                              |
| 7.6 | 外觀<br>Appearance                                   | 應當無顯著變化<br>印字標誌應清晰<br>Shall be no remarkable change.<br>The marking shall be legible . |
|     | 端子間的耐電壓值<br>Withstand Voltage Between Terminals    | 應滿足 NO.5. 1<br>Shall satisfy NO.5. 1   |
|     | 容值變化率 ( $\Delta C/ C$ )<br>Capacitance Change Rate | 變化率小於 $\pm 3\%$<br>Within $\pm 3\%$ of the value before test                           |
|     | 介質損耗<br>Dissipation Factor                         | 於 1KHz 時: 最大值為 0.002 (0.2%)<br>@ 1KHz: 0.002 (0.2%) max.                               |
|     | 絕緣電阻 (I. R.)<br>Insulation Resistance              | $\geq 50\%$ 的限制值在 NO.5 .4<br>$\geq 50\%$ of the limit value of NO.5 .4                 |
|     | 連接元件<br>Connection of Element                      | 應穩定<br>Shall be stable   |

| NO. | 項目 ITEM                            | 性能 PERFORMANCE                           | 測試條件 TEST CONDITIONS                                      |  |
|-----|------------------------------------|--|---|--|
| 7.7 | 耐久壽命<br>Endurance                  | 外觀<br>Appearance                         | 應當無顯著變化<br>Shall be no remarkable change                  | 試驗溫度: +110 ± 2 °C<br>測試電壓: 1.7 倍的額定電壓<br>試驗時間: 1,000 小時<br>每小時將電壓升至 1,000VAC · 持續 0.1 秒<br>每個電容分別通過一個 47Ω ± 5 % 電阻。<br>Test Temperature: +110 ± 2 °C<br>Test Voltage: 1.7 times * rated voltage.<br>Test Duration: 1,000 Hrs.<br>Once every hour the voltage is increased to 1000 V rms. For 0.1 sec. The test voltage is applied to each capacitor individually through a resistor of 47Ω ± 5 % . |
|     |                                    | 耐壓<br>Withstand Voltage                  | 應滿足 NO.5.1<br>Shall satisfy NO.5.1                        |  |
|     |                                    | 容值變化率 (ΔC/ C)<br>Capacitance Change Rate | 變化率小於 ± 10%<br>Within ± 10% of the value before test      |  |
|     |                                    | 介質損耗<br>Dissipation Factor               | 於 1KHz 時: 最大值為 0.008 (0.8%)<br>@ 1KHz : 0.008 (0.8%) max. |  |
|     |                                    | 絕緣電阻 (I. R.)<br>Insulation Resistance    | ≥ 50%的限制值在 NO.5.4<br>≥ 50% of the limit value of NO.5.4   |  |
| 7.8 | 耐濕負荷<br>Moisture Resistant Loading | 外觀<br>Appearance                         | 應當無顯著變化<br>Shall be no remarkable change                  | 試驗溫度: +40 ± 2 °C .<br>試驗濕度: 87%至 93%相對濕度<br>測試電壓: 額定電壓<br>試驗時間: 500 小時<br>試驗後放置於室內 1.5 ± 0.5 小時後再進行量測。<br>Test Temperature: +40 ± 2 °C .<br>Test Humidity: 87% to 93% R. H .<br>Test Voltage: rated voltage.<br>Test Duration: 500 Hrs.<br>After test, allow it stay alone for 1.5 ± 0.5 Hrs. at ordinary condition before making measurements.  |
|     |                                    | 耐壓<br>Withstand Voltage                  | 應滿足 NO.5.1<br>Shall satisfy NO.5.1                        |  |
|     |                                    | 容值變化率 (ΔC/ C)<br>Capacitance Change Rate | 變化率小於 ± 5%<br>Within ± 5 % of the value before test       |  |
|     |                                    | 介質損耗<br>Dissipation Factor               | 於 1KHz 時: 最大值為 0.002 (0.2%)<br>@ 1KHz: 0.002 (0.2%) max.  |  |
|     |                                    | 絕緣電阻 (I. R.)<br>Insulation Resistance    | ≥ 50%的限制值在 NO.5.4<br>≥ 50% of the limit value of NO.5.4   |  |

產品安規認證

PRODUCT SAFETY APPROVALS

| 標誌 Mark   | 認證單位 Agent           | 應用標準 Standard              | 規格範圍 Specification                                       | 證書號碼 Certificate No. |
|---|----------------------|----------------------------|--|----------------------|
|  | 美國 / 加拿大<br>UL / CUL | UL 60384<br>CSA E60384- 14 | Y2X1, 250 /275/ 300<br>VAC/ 1500VDC<br>0.001uF to 0.1 uF | E209251              |
|  | 歐盟<br>ENEC- SEMKO    | EN 60384- 14:2013 (ed.4)   | Y2X1, 250 /275/ 300<br>VAC/ 1500VDC<br>0.001uF to 0.1 uF | SE- ENEC-2002177R1   |
|  | 中國<br>CQC            | IEC 60384- 14: 2013        | Y2X1, 250 /275/ 300 VAC<br>0.001uF to 0.1 uF             | CQC13001099626       |

## Guideline Of Notabilia For The Usage Of Plastic Film Capacitors

### 塑膠薄膜電容器的使用上注意事項及指導

Plastic film capacitors use organic films for their dielectrics, thus the capacitors may fume or flame, depending on the circuit conditions they are in, when they are damaged by applying over-voltage or over-current.

塑膠薄膜電容器使用有機薄膜為介質，當使用超過額定電壓及額定電流，可能產生火焰，導致電容損壞，故請使用於正確的迴路。

#### 1. Circuit Design 迴路設計

- ① Please use capacitors within the range of their characteristic ratings, only after confirming their operating and mounting environments.

請確認電容器的使用範圍僅止於明定之額定特性規範，請先確認電容器使用之環境是否符合規範。

- ② In case of selecting a capacitor, please select the most suitable one which fits to your operating conditions.

請依照適合的作業條件選擇相對應的電容器使用。

- ③ Capacitors used for Across- The- Line, Line- By- Pass and Antenna- Coupling to suppress noises in an equipment, the capacitors need to be approved by overseas Safety Standards or 'Electric Appliance and Material Control' by Ministry of international Trade and Industry.

電容器用於跨接，旁路迴路及天線耦合等抑制噪音的裝置，需通過海外安全標準或日本通商產業省之電器用品安全法。

- ④ An applying voltage to a capacitor, including the peak of surge and ripple voltage ( D. C. voltage + A. C. Peak ), cannot be exceeded the rating voltage .

電容器之應用電壓，包括突波和紋波電壓的峰值(直流電壓+交流峰值)不可超過額定電壓。

- ⑤ Do not apply a current over its permissible level. Also, make sure the check the surrounding temperature and inherent temperature rise of a capacitor since a permissible current can be restricted by those factors.

切勿使用超出電容器可承載之電流並檢查電容器周圍之溫度，因有許多因素會影響電流之變化，進而造成電容器之溫度上升。

- ⑥ Please contact K Y E T for further details, if mechanical resonance (hum) occurs to a capacitor.

如電容器的發出共振(嗡嗡)之噪音時，請與科雅電子聯繫。

- ⑦ Do not conduct a rapid charge and discharge to a capacitor which may lead to characteristics degradations or break down of the capacitor.

請不要對電容器進行快速的充電和放電，此可能會導致電容器之特性退化或損壞。

#### 2. Mounting 安裝

- ① Do not apply any exceeding tension or torsion to lead wires of a capacitor, during the mounting process.

請不要使用任何超過電容導線可承受之張力進行插件。

- ② Please mount a capacitor where it dose not contact any other heating parts, high voltage parts and other parts.

請確認電容器使用環境，避免接觸任何其他升溫熱物件、高壓和其他部分料件。

- ③ Please conduct soldering process by strictly following the specified conditions .

進行焊接過程實，請嚴格遵循指定之焊接條件。

#### 3. Case of an emergency 緊急情況

- ① If a fuming, a flaming or an usual smell occurs from an equipment during its usage, please cut off the power supply by switching it off, pulling the plug out or other methods.

如使用設備有冒煙，火花或冒出不尋常之氣味，請切斷電源，拔掉插頭或以其它方法關閉設備。

#### 4. Storing and handling 儲存和處理

- ① A storage needs to be kept indoors at - 10 ~ +40 C and relative humidity of under 75% without any sudden temperature changes, direct sunlight and corrosive gas around.

需保存於 -10 ~ 40°C，相對濕度低於75%並確保沒有任何突然的溫度變化，避免直接陽光之曝曬及接觸腐蝕性氣體之環境。

- ② Do not apply and exceeding vibration, shock ( dropping) and pressure.

不應過度震動、碰撞和及外力的衝擊。

#### 5. Rejection 報廢

- ① In case of rejecting capacitors, please seek for professionals who deal with the industrial wastes treatments.

對於報廢電容器，請找處理工業廢品之專業人士處理。