

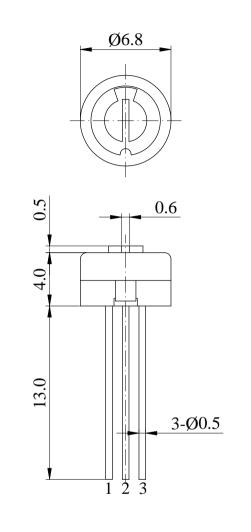
## 松暉電機工業股份有限公司 SONG HUEI ELECTRIC CO., LTD. 佛山市松暉電機科技有限公司 FOSHAN SONG HUEI ELECTRIC CO., LTD.

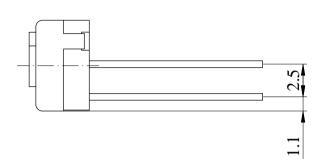
| 電氣特性 Electrical Characteristics              |                                                                                                                                                                                                                                                        |                                                                                                                       |  |  |
|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|--|--|
| 總阻值 (R)                                      | $10 \Omega \sim 1 M\Omega$                                                                                                                                                                                                                             |                                                                                                                       |  |  |
| Total resistance                             | 10.25. 1.14125                                                                                                                                                                                                                                         |                                                                                                                       |  |  |
| 總阻值容許誤差<br>Total resistance tolerance        | ± 10 %                                                                                                                                                                                                                                                 |                                                                                                                       |  |  |
| 阻值線性                                         |                                                                                                                                                                                                                                                        |                                                                                                                       |  |  |
| Resistance taper                             | В                                                                                                                                                                                                                                                      |                                                                                                                       |  |  |
| 摺動雜音                                         | Less than 150 mV                                                                                                                                                                                                                                       |                                                                                                                       |  |  |
| Sliding noise                                |                                                                                                                                                                                                                                                        |                                                                                                                       |  |  |
| <b>殘留阻值</b>                                  | R < 1 KΩ: Less than 10 Ω                                                                                                                                                                                                                               |                                                                                                                       |  |  |
| Residual resistance                          | $R \ge 1 \text{ K}\Omega$ : Less than 1 % of total resistance value                                                                                                                                                                                    |                                                                                                                       |  |  |
| 定格電力<br>Rated power (W)                      | $0.5 \text{ W} / 70 ^{\circ}\text{C} \text{ ; } 0 \text{ W} / 125 ^{\circ}\text{C}$                                                                                                                                                                    |                                                                                                                       |  |  |
| 環境溫度範圍<br>Temperature range                  | -55℃ ~ 125℃ ← Rated power %  100 80 40 20 40 60 ■ 80 ■ 100 100 120 125 ■ ■ 100 ■ 100 120 125                                                                                                                                                           |                                                                                                                       |  |  |
| 額定電壓<br>Rated voltage (V)                    | E=√P*R E: Rated voltage 額定電壓 (V) P: Power rating 額定電力 (W) R: Nominal total resistance 公稱全阻抗值 (Ω) 當額定電壓超過最高使用電壓的時候,最高使用電壓即為額定電壓。 When the rated voltage exceeds the maximum operating voltage,the maximum operating voltage shall be the rated voltage. |                                                                                                                       |  |  |
| 最高使用電壓<br>Max operating voltage              | AC 200 V                                                                                                                                                                                                                                               |                                                                                                                       |  |  |
| 絕緣阻抗<br>Insulation resistance                | More than 100 M $\Omega$ at DC 500 V                                                                                                                                                                                                                   |                                                                                                                       |  |  |
| 回轉角度<br>Adjustable angle                     | 280 °± 10 °                                                                                                                                                                                                                                            |                                                                                                                       |  |  |
| 電阻溫度係數<br>Resistance temperature coefficient | 100 ppm / °C                                                                                                                                                                                                                                           |                                                                                                                       |  |  |
| 耐電壓<br>Withstand voltage                     | 1 minute at AC 500 V                                                                                                                                                                                                                                   |                                                                                                                       |  |  |
|                                              | 機械特性 Mechanical Characteristics                                                                                                                                                                                                                        |                                                                                                                       |  |  |
| 項目 Item                                      | 測試條件 Test Conditions                                                                                                                                                                                                                                   | 規格 Performance                                                                                                        |  |  |
| 操作力矩<br>Rotational torque                    | -55 °C ~ 125 °C                                                                                                                                                                                                                                        | 30 ~ 200 gf.cm                                                                                                        |  |  |
| 止檔強度<br>Shaft stopper strength               | 將主軸轉到起點或終點處,施加力矩 1 Kgf.Cm (0.1 N.m),保持 15 秒鐘<br>The shaft shall be rotated to one end or the other end with pull torque 1 Kgf.cm (0.1 N.m) for 15 seconds.                                                                                             | 操作部和關聯部沒有變形損壞。<br>Without deformation or breads in the<br>operating part and contact part.                            |  |  |
| 端子強度<br>Strength of terminals                | 於端子尖端各方向施加 500 gf (5 N) 之力,保持 1 秒鐘。<br>When 500 gf (5 N) are weighted on top of terminal in every direction for 1 seconds.                                                                                                                             | 無端子鬆動損壞,端子基板破裂等。<br>Loose stable of terminal and damage on<br>stator board should not exist.                          |  |  |
| 焊接性能<br>Solder ability                       | 焊接溫度: $240 \pm 5$ °C Soldering temperature: $240 \pm 5$ °C 浸漬時間: $3 \pm 0.5$ seconds Dipping time: $3 \pm 0.5$ seconds                                                                                                                                 | 除切割面外,75%以上浸焊部位被焊料覆蓋。<br>More than 75% of the dipping part shall be covered by solder, excluding the cutting surface. |  |  |

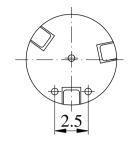


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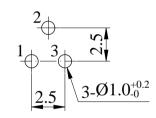
| 耐焊接<br>Soldering heat test           |                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
|                                      | 耐候性 Weather Performance                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |
| 項目 Item                              | 測試條件 Test Conditions                                                                                                                                                                                                                           | 規格 Performance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |
| 耐濕度<br>Humidity test                 | 置於溫度 $40\pm2$ °C,溼度 $90\sim95$ % RH,500 小時後,放於正常環境下 1 小時,然後 1 小時內測試。 Testing switch being kept in the conditions at $40\pm2$ °C and $90\sim95$ % RH for 500 hours in a normal ambient condition for 1 hour. then to be measured within 1 hour. | 絕緣電阻在 $10\mathrm{M}\Omega$ 以上,DC $500\mathrm{V}$ ,耐壓 AC $500\mathrm{V}$ 持續 $1\mathrm{分鐘}$ ,操作力矩變化在 $\pm30\%$ 之內,各部位無損壞,無機械性能異常。電阻變化 $\pm10\%$ 以內。Insulation resistance is more than $10\mathrm{M}\Omega$ under DC $500\mathrm{V}$ , and also withstand voltage AC $500\mathrm{V}$ for $1\mathrm{minute}$ . The operating torque shall be within $\pm30\%$ of initial value, and every parts should not defected in appearance and mechanical performance. The resistance change shall be within $\pm10\%$ . |  |  |
| 耐熱性<br>Heat test                     | 置於溫度 $125 \pm 2$ °C,500 小時後,放於正常環境下 1 小時,然後 1 小時內測試。<br>Testing switch being kept in the conditions at $125 \pm 2$ °C for 500 hours and then in a normal ambient condition for 1 hour. Then to be measured within 1 hour.                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |
| 低溫特性<br>Cold test                    | 置於溫度 -55 ± 2 $\mathbb{C}$ , 500 小時後,放於正常環境下 1 小時,然後 1 小時內測試。<br>Testing switch being kept in the conditions at -55 ± 2 $\mathbb{C}$ for 500 hours and then in a normal ambient condition for 1 hour. then to be measured within 1 hour.        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |
|                                      | 耐久性 Durability                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |
| 項目 Item                              | 測試條件 Test Conditions                                                                                                                                                                                                                           | 規格 Performance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |
| 壽命 (無負荷)<br>Life test (Without load) | 無負荷狀態連續測試,速度為 $6 \sim 10$ 回 / 分,總次數 200 次。 200 cycles of operation shall be performed continuously at the rate of $6 \sim 10$ cycles / minute without load.                                                                                    | 絕緣電阻在 $10~M\Omega$ 以上,DC $500~V$ ,耐壓 AC $500~V$ 持續 $1~$ 分鐘,操作力矩變化在 $\pm~$ $30~$ %之内,各部位無損壞,無機械性能異常。<br>Insulation resistance is more than $10~M\Omega$ under DC $500~V$ , and also withstand voltage AC $500~V$ for $1~$ minute. The operating torque shall be within $\pm~$ $30~$ % of initial value, and every parts should not defected in appearance and mechanical performance.                                                                                                                        |  |  |

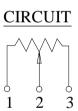






## Mounting Hole





| Non notation tolerance |      |  |  |
|------------------------|------|--|--|
| < 10                   | ±0.3 |  |  |
| 10 ~ 100               | ±0.5 |  |  |
| > 100                  | ±0.8 |  |  |

## SONG HUEI ELECTRIC CO., LTD. FOSHAN SONG HUEI ELECTRIC CO., LTD.

Approval



Checked



Projected



| MODEL: 3329H/018 |
|------------------|
|------------------|

NO.

| UNIT    | mm       | SCALE | 3:1        |
|---------|----------|-------|------------|
| VERSION | 1.1      | DATE  | 2017.09.26 |
| DRAWING | 3362-032 |       |            |

|          |         | > 100 | $\pm 0.8$    |
|----------|---------|-------|--------------|
| 4        |         |       |              |
| <u> </u> |         |       |              |
| 2        |         |       |              |
| Â        | 整理图元    | 何鸿根   | 2018. 12. 18 |
| ISSUE    | SUBJECT | NAME  | DATE         |

**RECORD**