

# 承認書

APPROVAL SHEETS

客戶名稱 : 鴻海精密工業股份有限公司  
MESSRS

品名 : DC POWER JACK  
DESCRIPTION

料號 : SHD-5014SGLH6-ES-L2-TR  
PART NO

客戶料號 :  
CUSTOMER  
PART NO

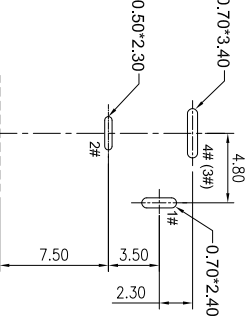
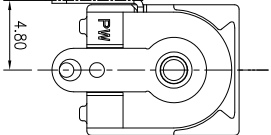
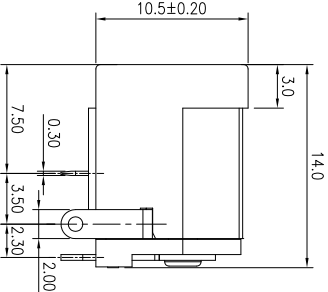
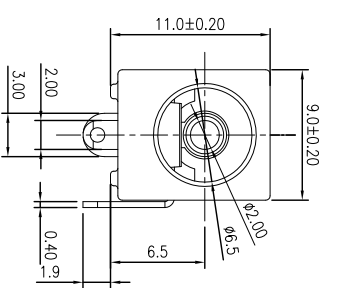
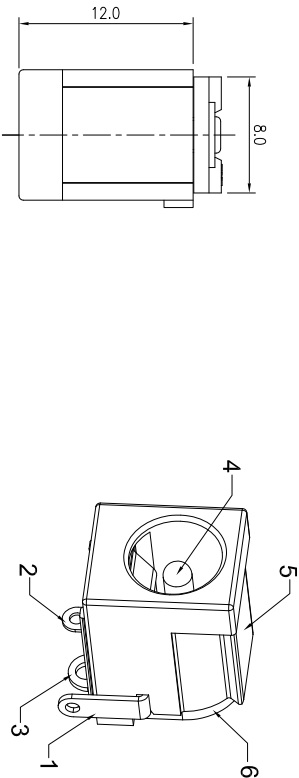
承認印 APPROVED BY



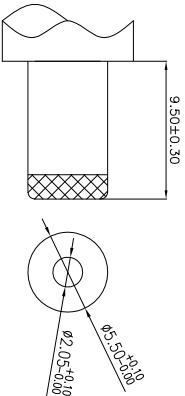
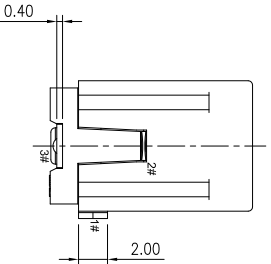
博 歲 電 子 股 份 有 限 公 司  
POWERWAY ELECTRONICS CO., LTD.  
佳 俊 有 限 公 司  
BEST SMART LIMITED  
2 4 1 6 1 新北市三重區中華路 18 號 3 樓  
3F., No. 18, Zhonghua Road, Sanchong  
District, New Taipei City 24161, Taiwan  
TEL : 886-2-2986-6161 FAX : 886-2-2971-8665

SHD-5014SGLH6-ES-L2-TR

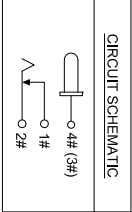
Series  
Type  
Terminal Plated  
E : Silver-Plated  
Housing Material  
L2 : LCP  
Terminal Material  
S : SUS



PCB EDGE  
RECOMMENDED PCB LAYOUT  
TOP VIEW  
TOLERANCE: ±0.05mm  
PCB THICKNESS: 1.00±0.05mm



PLUG DIAGRAM (TOL:±0.05)



|   |                     |       |                          |
|---|---------------------|-------|--------------------------|
| 6 | Housing Cover       | Nylon |                          |
| 5 | Housing             | LCP   |                          |
| 4 | Center Pin          | Brass | Nickel-Plated(30u" Min.) |
| 3 | Center Pin Terminal | Brass | Silver-Plated(20u" Min.) |
| 2 | Tip Spring          | SUS   | Silver-Plated(20u" Min.) |
| 1 | Shunt Terminal      | Brass | Silver-Plated(20u" Min.) |

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POWERWAY ELECTRONICS CO.,LTD.

|          |                        |             |                                                      |
|----------|------------------------|-------------|------------------------------------------------------|
| FILE NO. | SHD-5014GL (SERIES)    | TITLE       | DC, Type A, Receptacle, Horizontal, Single Port, THT |
| PART NO. | SHD-5014SGLH6-ES-L2-TR | DESIGNED BY | Etic 2019/06/14                                      |

TOLERANCE(公差):  
0.000 mm ± 0.075 mm  
0.00 mm ± 0.15 mm  
0.0 mm ± 0.25 mm



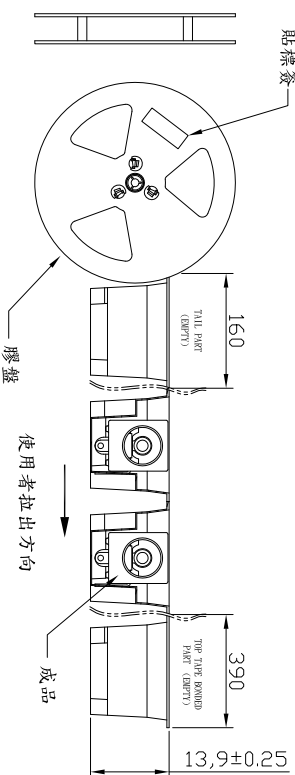
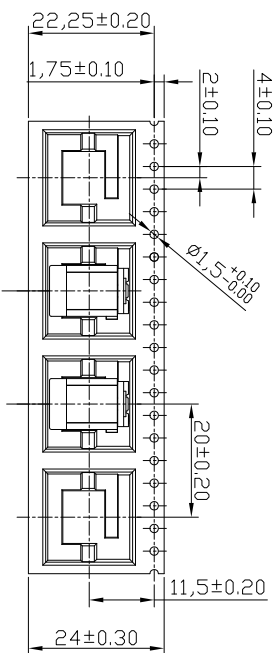
|       |     |       |     |             |                  |
|-------|-----|-------|-----|-------------|------------------|
| UNIT  | mm  | REV.  | A.0 | CHECKED BY  | Aaron 2019/06/14 |
| SCALE | 1:1 | SHEET | 1/1 | APPROVED BY |                  |

|      |      |             |      |        |
|------|------|-------------|------|--------|
| ZONE | REV. | DESCRIPTION | DATE | CHANGE |
|------|------|-------------|------|--------|

1. 包材:

卷料式包裝帶 1 SET  
流程單編號標籤 1 PC  
無鉛製程標籤 1 PC  
1\*210=210 PCS  
PS TAPE REEL 1 SET  
1\*210=210 PCS

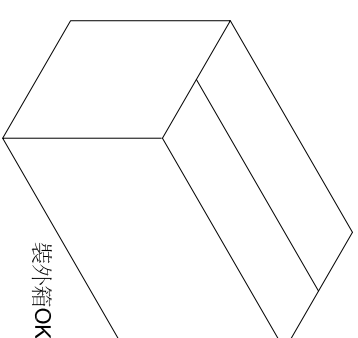
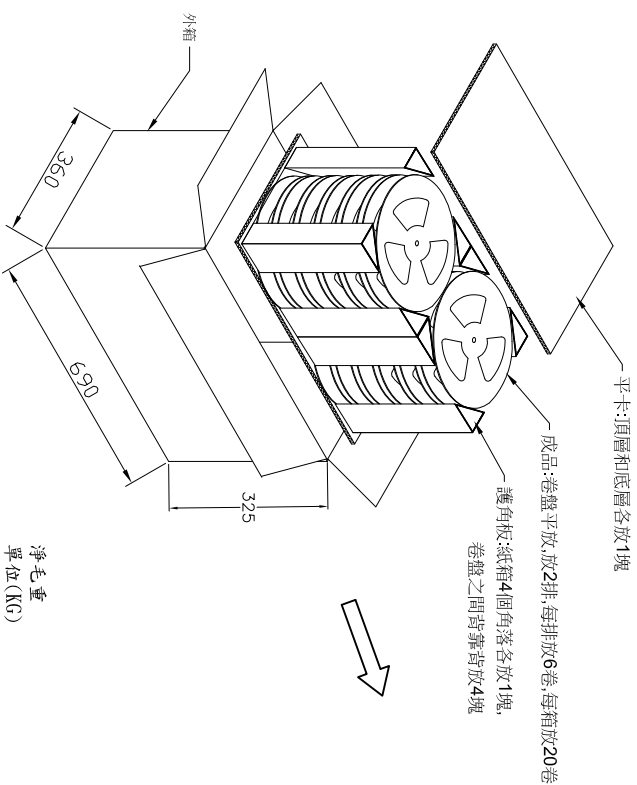
數量:  
PACKING MATERIAL:  
Q' TY:



2. 包材:

外箱 1 PC  
無鉛製程標籤 1PC  
平卡/紙板 2PC  
210\*20=4200 PCS  
CARTON 1 PC  
210\*20=4200 PCS

數量:  
PACKING MATERIAL:  
Q' TY:



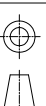
淨毛重  
單位(KG)  
數量  
單位(PCS)

| P / N                  | N.W. | G.W.     | Q'TY |
|------------------------|------|----------|------|
| SHD-5014SGLH6-ES-L2-TR | **Kg | **±0.3Kg | 4200 |

**PW** 博 威 電 子 股 份 有 限 公 司  
POWERWAY ELECTRONICS CO.,LTD.

TOLERANCE(公差):

0.000 mm ±  
0.00 mm ±  
0.0 mm ±



UNIT  
單位  
SCALE  
比例

mm  
inch  
1:1

REV.  
版本  
SHEET  
頁次

A.0  
1/1

CHECKED  
BY  
APPROVED  
BY

Eric  
2019-03-26  
Aaron  
2019-03-26



## DC POWER JACK SPECIFICATION FOR REFLOW SOLDERING PROCESS

### 1. Materials and Finish:

#### 1.1 Housing

- ◆ Thermoplastic
- ◆ Color: Black or Optional Color Available on Demand

#### 1.2 Contact

- ◆ Alloy: (See Material Specifications for Reference)
- ◆ Contact Area: Optional Tin, Silver, Gold Flash or Nickel plating
- ◆ Solder Area: Tin Plating or Nickel Plating
- ◆ Under-Plating: Nickel over all

#### 1.3 Center Pin

- ◆ Alloy: (See Material Specifications for Reference)
- ◆ Nickel Plating

#### 1.4 Shell(option)

- ◆ Alloy (See Material Specifications for Reference)
- ◆ Nickel plating

※ Expiration For Plating: 6 months storage period under non-unpacked parts (40%~60%RH)

### 2. Rating:

- ◆ Current & Voltage:

| Diameter of Center Pin(mm)   | Rated voltage (V) | Rated current(A) |
|------------------------------|-------------------|------------------|
| Less than or equal 1.30mm    | 12                | 1                |
| 1.65mm                       |                   | 2                |
| greater than or equal 2.00mm |                   | 3                |

- ◆ Storage & Operating Temperature: -25°C~70°C



### 3. Electrical Performance:

| Item |                                 | Test conditions                                                                                                                                             | Performance               |
|------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| 3.1  | Contact Resistance              | EIA-364-23B.<br>Subject specimens to 100 mA maximum and 20 mV maximum dry circuit voltage                                                                   | 50mΩ Max (initial)        |
| 3.2  | Insulation Resistance           | EIA-364-21C.<br>Subject specimens to DC 500V and measure insulation resistance between adjacent contacts, also measure between the contacts and the shield. | 100MΩ Min.                |
| 3.3  | Dielectric Withstanding Voltage | EIA-364-20B.<br>Subject specimens to 500VAC (50—60Hz) for 1 minute between terminals and ground.                                                            | No discharge or breakdown |

### 4. Mechanical Performance:

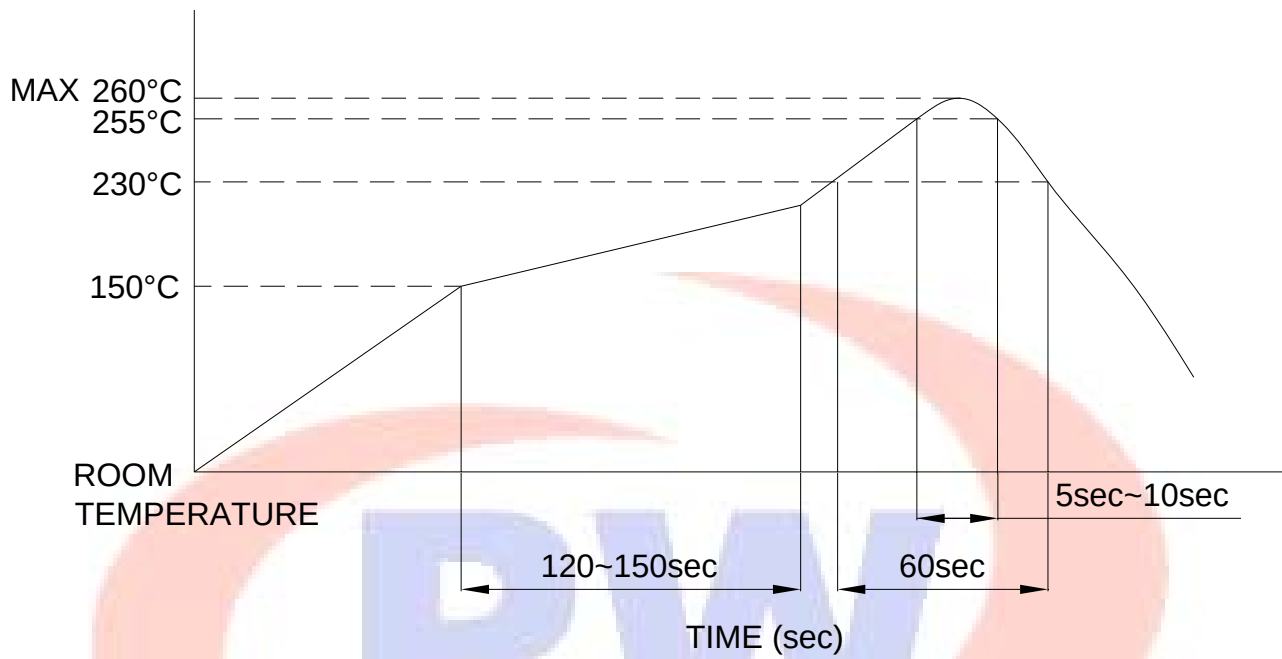
| Item |                | Test conditions                                                                         | Performance                                                                   |
|------|----------------|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| 4.1  | Durability     | EIA-364-09C.<br>500cycles operating at a rate of 200±50 cycles per hour , without load. | (1) Contact Resistance:100mΩ Max<br>(2) There shall be no functional defects. |
| 4.2  | Mating Force   | EIA-364-13B.<br>Mating at the rate of 12.5mm per minute.                                | 5.0kgf (Max. )                                                                |
| 4.3  | Unmating Force | EIA-364-13B.<br>Mating at the rate of 12.5mm per minute.                                | 10cycles 1.4kgf (Min. )<br>5.0kgf (Max. )                                     |

*5. Environmental Performance:*

| Item |                                | Test conditions                                                                                                 | Performance                                                                                           |
|------|--------------------------------|-----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| 5.1  | Heat Test                      | EIA-364-17B.<br>70°C±2°C for 96 hours. After test kept under 25 °C & 40%-60%RH for 30 minutes.                  | (1) Contact Resistance:100mΩ Max<br>(2) There shall be no functional defects.                         |
| 5.2  | Humidity Test                  | EIA-364-31B.<br>40°C±2°C, 90-95% RH for 96 hours. After test kept under 25 °C & 40%-60%RH for 30 minutes.       | (1) Contact Resistance:100mΩ Max<br>(2) There shall be no functional defects.                         |
| 5.3  | Soldering Heat Resistance Test | EIA-364-56C.<br>Equipment conditions refer to the following recommended reflow soldering profile.               | (1) Contact Resistance:100mΩ Max<br>(2) Mechanical and electrical characteristics shall be satisfied. |
| 5.4  | Solderability Test             | EIA-364-52B.<br>The top of the terminals shall be dipped 2mm in the solder bath of 245°C±5°C for 5±1.0 seconds. | A new uniform coating of solder shall cover a minimum of 95% of the surface being immersed.           |



REFLOW SOLDERING PROFILE



RECOMMENDED REFLOW SOLDERING CURVE

*6. Test Group and Sequence:*

| ITEM             | DESCRIPTION                    | TEST GROUP    |     |     |     |     |
|------------------|--------------------------------|---------------|-----|-----|-----|-----|
|                  |                                | A             | B   | C   | D   | E   |
|                  |                                | TEST SEQUENCE |     |     |     |     |
| 1                | Visual inspection              | 1             | 1   | 1   | 1   | 1,3 |
| 2                | Contact Resistance             | 2,7           | 2,4 | 2,4 | 2,4 |     |
| 3                | Insulation Resistance          | 3,8           |     |     |     |     |
| 4                | Withstanding Voltage           | 4,9           |     |     |     |     |
| 5                | Mating & Unmating Force        | 5,10          |     |     |     |     |
| 6                | Durability                     | 6             |     |     |     |     |
| 7                | Heat Test                      |               | 3   |     |     |     |
| 8                | Humidity Test                  |               |     | 3   |     |     |
| 9                | Soldering Heat Resistance Test |               |     |     | 3   |     |
| 10               | Solderability Test             |               |     |     |     | 2   |
| Sample Size(pcs) |                                | 5             | 5   | 5   | 5   | 5   |

Note: