

1. 適用範圍/SCOPE

JWDC-HSS1 是基於開環霍爾原理的電流感測器。可適用於對交流、直流、脈衝電流的隔離精確測量，測量時一次側與二次側間完全絕緣。

JWDC-HSS1 adopts open loop Hall principle . It can measure AC & DC & Pulse current , the primary and secondary sides are completely insulated from each other during measurement.

產品特性/Feature

- 開環霍爾原理/Open loop Hall principle
- 隔離電流測量/Galvanic isolation measurement
- 工作溫度範圍/Opening temperature range :
-40 °C ~ 85°C
- 低功耗/Low power consumption

應用領域/ Applications

- 變頻器 /Inverter
- 不斷電供應系統 /UPS
- 焊接應用電源/Discharger welding
- DC/DC 變換器/DC-DC converter

產品優勢/Advantages

- 體積小 / Small size
- 安裝方便 / Easy to install
- 抗干擾強 / Noise Immunity Characteristics
- 低磁滯 / Low Magnetic Hysteresis

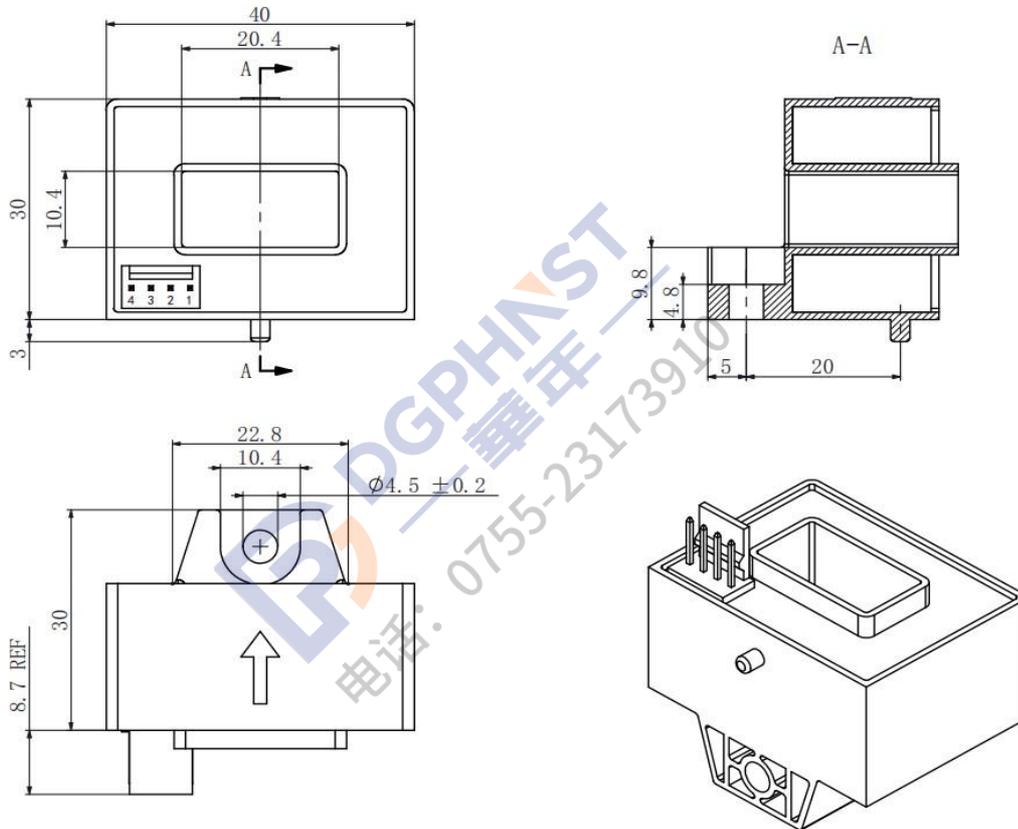
2. 產品表/List

| 型號/Type | I _{PN} Rated current | I _{PM} Detection range | Unit |
|----------------|----------------------------------|------------------------------------|------|
| JWDC-HSS1-50F | 50 | ±150 | A |
| JWDC-HSS1-100F | 100 | ±300 | A |
| JWDC-HSS1-200F | 200 | ±600 | A |
| JWDC-HSS1-300F | 300 | ±900 | A |
| JWDC-HSS1-400F | 400 | ±900 | A |
| JWDC-HSS1-500F | 500 | ±900 | A |
| JWDC-HSS1-600F | 600 | ±900 | A |

3. 外觀/APPEARANCE



4. 工程圖和結構/OUTLINEERING DRAWING AND STRUCTURE(單位：mm)



• 未注尺寸公差为±0.5mm

引腳定義/Pin Definition

| 引腳/Pin | 定義/Definition | 說明/ Comment |
|--------|---------------|----------------------|
| 1 | +VCC | +15V |
| 2 | -VCC | -15V |
| 3 | Vout | 類比信號輸出/Analog Output |
| 4 | GND | 電源地/GND |

5. 絕對最大額定值/Absolute maximum ratings

| 參數/Parameter | 符號/Symbol | 規格/Spec | | 單位/Unit |
|--------------------------------|------------------|---------|---------|---------|
| | | 最小值/min | 最大值/Max | |
| 工作溫度/ Operating temperature | T _A | -40 | +85 | °C |
| 存儲溫度/ Storage temperature | V _s | -45 | +90 | °C |
| ESD | U _{ESD} | | 2 | kV |

6. 隔離性能/ Insulation coordination

| 參數/Parameter | 符號/Symbol | 值/Value | 單位/Unit |
|----------------------------------------------------------------------------|------------------|---------|---------|
| 交流耐壓測試 (1 分鐘, 50Hz 有效值) : RMS voltage for AC insulation test 50Hz/1 min | V _D | 3 | kV |
| 浪湧電壓 /@1.2/50us : Impulse withstand voltage 1.2/50us | U _w | 5 | kV |
| 絕緣起痕指數 : Comparative tracking index | CTI | 275 | |
| 絕緣電阻 : Insulation resistance | R _{INS} | 1000 | MΩ |
| 電氣間隙 : Clearance (pri. – sec.) | D _{Cl} | 7.08 | mm |
| 爬電距離 : Creepage distance (pri. – sec.) | D _{CP} | 6.23 | mm |

7. 電氣資料 /Electrical data At Ta=25°C , Fcc=5F, unless otherwise noted

| 參數定義 Parameter | 符號 Symbol | 規格/ Spec | | | 單位 Unit | 備註 Remark |
|------------------------------------------------------|------------------|-------------------------------------|---------|---------|------------|----------------------|
| | | 最小值/min | 標準值/Typ | 最大值/Max | | |
| 供電電壓 / Supply voltage | V _{CC} | | ±15 | | V | |
| 消耗電流/ Current consumption @I _p =0 | I _{CC} | | | ±30 | mA | U _c =±15V |
| 零點輸出/ Electrical offset voltage | V _{0e} | | | ±40 | mV | 50F |
| | | | | ±30 | mV | 100F~600F |
| 增益/Gain (@±I _{PN} , R _L =10K) | G | 4/I _{PN} | | | V/A | Ta=25°C |
| 輸出電壓/Output Volage | V _{out} | V _{out} = G×I _p | | | V | Ta=25°C |
| 負載電阻/Load Resistance | R _L | 10 | | | KΩ | |

| | | | | | | |
|---------------------------------------|------------------|---|--|-----------|-----------------|-----------|
| 基本誤差 ($I_{PN}, T_A=25^{\circ}C$) | Xm | | | ± 1 | %of Ipn | |
| 線性度 ($0 \sim \pm I_{PN}$) | ϵ_L | | | ± 1 | %of Ipn | |
| 負載電容 Load capacitance | C _{OUT} | 0 | | 6 | nF | |
| 零點溫漂/ Zero point temperature drift | Vodrift | | | ± 2 | mV/ $^{\circ}C$ | 50F |
| | | | | ± 1 | mV/ $^{\circ}C$ | 100F~600F |
| 增益溫漂/ Gain temperature drift | Dg | | | ± 0.1 | %/ $^{\circ}C$ | |
| 頻寬/ Frequency bandwidth | Bw | | | 50 | KHz | -3dB |
| 雜訊/Nosie | Vn | | | 25 | mV | |

8. 其他/OTHERS

- 1 如果在使用中有超出本規格書的要求，必須經由雙方協商確認。
In the eFent that an impropriety is found beyond this specification ,it shall be fixed by mutual agreement between the parties.
- 2 如果本規格書有不適當的情況，必須通過雙方協商並由本公司修改。
In the eFent that an impropriety is found in this specification , SUZHOU WALTER ELECTRONIC CO., LTD. shall amend it by mutual agreement between the parties.