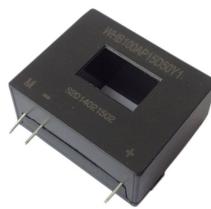


## 简介 Feature :

- 应用闭环原理制作的霍尔电流传感器  
Closed loop (compensated) current transducer using the hall effect
- 电流传感器的初、次级是绝缘的，能够测量直流，交流，脉冲等  
For the electronic measurement of currents: DC, AC,pulsed,..., with galvanic separation between primary circuit and secondary circuit
- 供电： DC ±9 .. 15V  
Supply voltage: DC ±9 .. 15V



RoHS



CE

## 特性与应用 Advantages &amp; Applications:

| 特 性 Advantages   | 应 用 Applications   |
|--|--|
| <ul style="list-style-type: none"> <li>高精度 Excellent accuracy</li> <li>良好的线性 Very good linearity</li> <li>低温漂 Low temperature drift</li> <li>抗干扰能力强 High immunity to external interference</li> <li>响应时间快 Optimized response time</li> </ul> | <ul style="list-style-type: none"> <li>电磁炉的电流监控与应用<br/>The application of induction cooker</li> <li>AC/DC 变速驱动 AC/DC variable-speed drive</li> <li>开关电源 Switched Mode Power Supplies (SMPS)</li> <li>UPS 不间断电源 Uninterruptible Power Supplies (UPS)</li> <li>逆变器上的应用 The applications of inverter</li> </ul> |

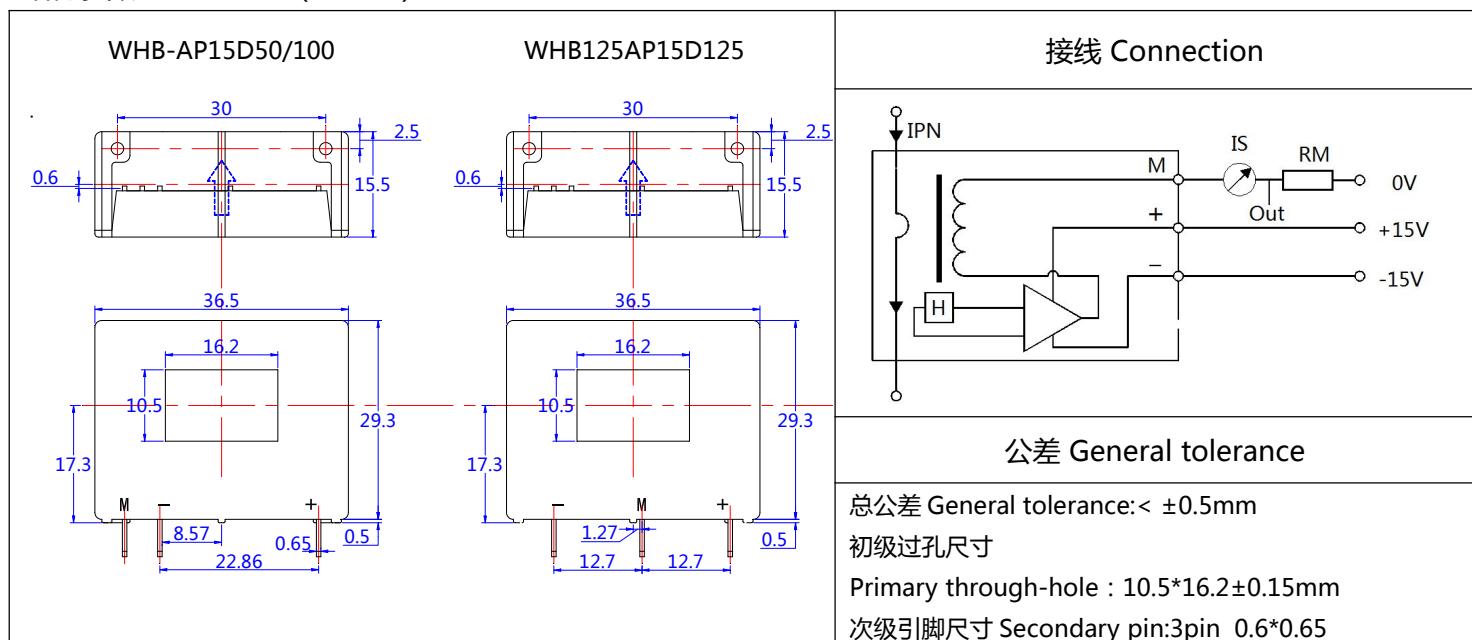
## 电气参数 Electrical data : ( Ta=25°C , Vc=±15VDC )

| 参数 Parameter                        | 型号 Type<br>符 号 Symbol | WHB50<br>AP15D50           | WHB100<br>AP15D50 | WHB125<br>AP15D125 | WHB200<br>AP15D100 | Unit |
|-------------------------------------|-----------------------|----------------------------|-------------------|--------------------|--------------------|------|
| 额定输入 Rated input                    | IPN                   | 50                         | 100               | 125                | 200                | A    |
| 测量范围 Measuring range                | IP                    | 0 ~ ±150                   | 0 ~ ±300          | 0 ~ ±375           | 0 ~ ±600           | A    |
| 线圈匝比 Turns ratio                    | Np/<br>NS             | 1:1000                     | 1:2000            | 1:1000             | 1:2000             | T    |
| 输出电流 Output current rms             | IS                    | ±50*IP/IPN                 | ±50*IP/IPN        | ±125*IP/IPN        | ±100*IP/IPN        | mA   |
| 线圈内阻 Secondary coil resistance      | RS                    | 30                         | 50                | 30                 | 50                 | Ω    |
| 测量电阻 Inside resistance              | RM                    | [(VC-0.6V)/(IS*0.001)]-RS  |                   |                    |                    |      |
| 供电电压 Supply voltage                 | VC                    | ( ±9 ~ ±15 ) ±5%           |                   |                    |                    |      |
| 精度 Accuracy                         | XG                    | @IPN,T=25°C < ±0.5         |                   |                    |                    |      |
| 偏移电流 Offset current                 | IOE                   | @IP=0,T=25°C < ±0.2        |                   |                    |                    |      |
| 零点温度漂移 Temperature variation of IOE | IOT                   | @IP=0,-40 ~ +85°C < ±0.005 |                   |                    |                    |      |
| 线性度 Linearity error                 | εr                    | < 0.1                      |                   |                    |                    |      |
| 跟随精度 di/dt                          |                       | > 100                      |                   |                    |                    |      |
| 响应时间 Response time                  | tra                   | @90% of IPN < 1.0          |                   |                    |                    |      |
| 静态功耗 Power consumption              | IC                    | 15+Is                      |                   |                    |                    |      |
| 带宽 Bandwidth                        | BW                    | @-3dB,IPN DC-200           |                   |                    |                    |      |
| 绝缘电压 Insulation voltage             | Vd                    | @50/60Hz, 1min,AC 3.0      |                   |                    |                    |      |

## 总体参数 General data :

| 参数 Parameter               | 符号 Symbol               | 数值 Value  | 单位 Unit |
|----------------------------|-------------------------|-----------|---------|
| 工作温度 Operating temperature | TA                      | -40 ~ +85 | °C      |
| 储存温度 Storage temperature   | Ts                      | -55~ +125 | °C      |
| 重量 Mass                    | m                       | 21        | g       |
| 外壳材料 Plastic material      | PBT G30/G15 , UL94- V0; |           |         |
| 标准 Standards               | IEC60950-1:2001         |           |         |
|                            | EN50178:1998            |           |         |
|                            | SJ20790-2000            |           |         |

## 结构参数 Dimensions( in mm):



## 备注 Remarks :

1,当被测电流通过传感器的初级引脚时，在输出端有对应的电流信号输出。（注意：错误的接线可能损坏传感器）

When the current will be measured goes through the primary pin of a sensor, the current will be measured at the output end.(Note:The false wiring may result in the damage the sensor).

2,可以根据客户的要求设计不同额定电流的产品，并且传感器的输出电压时可选择的；

Custom design in the different rated input current and the output voltage are available.

3,母排完全充满孔时，动态性能最佳；

The dynamic performance is the best when the primary hole if fully filled with;

4,初级导体温度不应超过 100°C；

The primary conductor should be <100°C;