

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 $\pm 9 \sim 15V$
Supply voltage: DC $\pm 9 \sim 15V$



RoHS



特性与应用 Advantages & Applications:

特性 Advantages	应用 Applications
◇ 高精度 Excellent accuracy ● 良好的线性 Very good linearity ◇ 低温漂 Low temperature drift ◇ 抗干扰能力强 High immunity to external interference ● 响应时间快 Optimized response time	◇ 电磁炉的电流监控与应用 The application of induction cooker ● AC/DC 变速驱动 AC/DC variable-speed drive ◇ 开关电源 Switched Mode Power Supplies (SMPS) ● UPS 不间断电源 Uninterruptible Power Supplies (UPS) ◇ 逆变器上的应用 The applications of inverter

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

型号 Type 参 数 Parameter		符 号 Symbol	B50 AP15D50	B100 AP15D50	B125 AP15D125	B200 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/ 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					Ω
供电电压 Supply voltage	VC	(±9 ~ ±15) ±5%					V
精度 Accuracy	XG	@IPN,T=25℃ < ±0.5					%
偏移电流 Offset current	IOE	@IP=0,T=25℃ < ±0.2					mA
零点温度漂移 Temperature variation of IOE	IOT	@IP=0,-40 ~ +85℃ < ±0.005					mA/℃
线性度 Linearity error	εr	< 0.1					%FS
跟随精度 di/dt		> 100					A/μs
响应时间 Response time	tra	@90% of IPN < 1.0					μs
静态功耗 Power consumption	IC	15+Is					mA
带宽 Bandwidth	BW	@-3dB,IPN DC-200					KHZ
绝缘电压 Insulation voltage	Vd	@50/60Hz, 1min,AC 3.0					KV

B-AP15D50/100/125Series Closed-loop Hall Current sensor

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):

WHB-AP15D50/100 WHB125AP15D125		接线 Connection
		公差 General tolerance
		总公差 General tolerance:< ±0.5mm 初级过孔尺寸 Primary through-hole : 10.5*16.2±0.15mm 次级引脚尺寸 Secondary pin:3pin 0.6*0.65

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℃；
The primary conductor should be <100°C;