



DATA SHEET

Hall Effect Current Sensor

PN: CHB_D15D25

IPN=25/50A

Feature

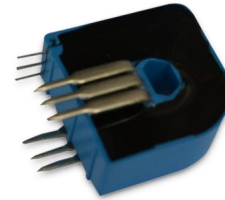
- Closed- loop (compensated) current transducer
- Capable measurement of currents: DC, AC,pulse with galvanic isolation between primary circuit and secondary circuit.
- Supply voltage: DC $\pm 12 \sim 15$ V

Advantages

- High accuracy
- Easy installation
- Low temperature drift
- Optimized response time
- Low power consumption
- High immunity to external interference
- Very good linearity
- Can be customized

Applications

- The application of induction cooker
- AC/DC variable-speed drive
- Uninterruptible Power Supplies (UPS)
- Switched Mode Power Supplies (SMPS)
- Inverter applications



RoHS



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

Parameter	Ref	CHB25D15D25	CHB50 D15D25
Rated input Ipn(A)		25	50
Measuring range Ip(A)		0 ~ ±50	0 ~ ±100
Turns ratio Np/NS (T)		1:1000	1:2000
Output current rms IS(mA)		±25*IP/IPN	±25*IP/IPN
Secondary coil resistance RS (Ω)		30	40
Inside resistance RM (Ω)		[(VC-2.0V)/(IS*0.001)]-RS	
Supply voltage VC(V)		(±12 ~ ±15) ±5%	
Accuracy XG(%)	@IPN,T=25°C	< ±0.5	
Offset current IOE(mA)	@IP=0,T=25°C	< ±0.2	
Temperature variation of IOE IOT(mA/°C)	@IP=0,-40 ~ +85°C	< ±0.5	
Linearity error εr(%FS)		< 0.1	
Di/dt accurately followed (A/μs)		> 50	



Cheemi Technology Co., Ltd

Tel: 025-85996365

E-mail: info@cheemi-tech.com

www.cheemi-tech.com

Add:N22, Xianlongwan, Xianyin South Road, Qixia District, Nanjing - China.

Cheemi Technology Co., Ltd

Response time $t_{ra}(\mu s)$	@90% of IPN	< 1.0
Power consumption IC(mA)		15+I _s
Bandwidth BW(KHZ)	@-3dB,IPN	DC-100
Insulation voltage V _d (KV)	@50/60Hz, 1min,AC	4.0

General data:

Parameter	Value
Operating temperature TA(°C)	-40 ~ +85
Storage temperature TS(°C)	-55 ~ +125
Mass M(g)	10
Plastic material	PBT G30/G15, UL94- V0;
Standards	IEC60950-1:2001
	EN50178:1998
	SJ20790-2000

Dimensions(mm):

Connection

General tolerance

General tolerance: $\leq \pm 0.2\text{mm}$
 Primary through-hole & size of Primary pin :
 $4.4 \times 6.6 \pm 0.15\text{mm}$; $0.8 \times 0.9 \pm 0.15\text{mm}$;
 Secondary pin: 3pin 0.25×0.5

Remarks:

- When the current goes through the primary pin of a sensor, the voltage will be measured at the output end.
- Custom design is available for the different rated input current and the output voltage.
- The dynamic performance is the best when the primary hole is fully filled with.
- The primary conductor should be $< 100^\circ\text{C}$.

WARNING : Incorrect wiring may cause damage to the sensor.

