



# DATA SHEET

## Hall Effect Current Sensor

PN: CHB\_LSP15D25

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  $\pm 12\sim 15V$

### Advantages

- High accuracy
- Easy installation
- Low temperature drift
- Optimized response time
- 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)

Ref	CHB25LSP15D25	CHB50LSP15D25
<b>Parmeter</b>		
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 er(%FS)		< 0.1
Di/dt accurately followed (A/μs)		> 50
Response time tra(μs)	@90% of IPN	< 1.0
Power consumption IC(mA)		15+Is



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

Bandwidth BW(KHZ)	@-3dB,IPN	DC-100
Insulation voltage Vd(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: <math>\pm 0.2\text{mm}</math>  
 Primary through-hole :  $D 8.5 \pm 0.15\text{mm}$   
 Fixed pin:  $0.8 * 0.9 \pm 0.15\text{mm}$  ;  
 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  $< 100^\circ\text{C}</math>.$

**WARNING : Incorrect wiring may cause damage to the sensor.**

