



DATA SHEET

Hall Effect Current Sensor

PN: CHB_LX5S6

IPN=05~25A

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 +5.0V
- PCB mounting installation

Advantages

- High accuracy
- Low temperature drift
- Optimized response time, no insertion losses
- Low power consumption
- Very good linearity
- Can be customized

Applications

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



Electrical data: (Ta=25°C, Vc=+5.0VDC,RL=2KΩ,CL=10000pF)

Ref Parmeter	CHB05LX5S6	CHB10LX5S6	CH15LX5S6	CHB25LX5S6
Rated input Ipn(A)	05	10	15	25
Measuring range Ip(A)	0 ~ ±16	0 ~ ±32	0 ~ ±48	0 ~ ±80
Size of Input pin *d (MM)	Ø1.0	Ø1.0	Ø1.0	Ø1.4
Turns ratio Np/NS (T)	2:1600	1:1600	1:1200	1:2000
Inside resistance RM(Ω)	100±0.1%	100±0.1%	50±0.1%	50±0.1%
Output voltage Vo(V)	2.500±0.625*(IP/IPN)			
Output voltage Vo(V)	@IP=0,T=25°C		2.500	
Supply voltage VC(V)	+5.0 ±5%			
Accuracy XG(%)	@IPN,T=25°C		< ±0.7	
Offset voltage VOE(mV)	@IP=0,T=25°C		< ±25	
Temperature variation of VOE VOT(mV/°C)	@IP=0,-40 ~ +85°C		< ±0.5	
Linearity error er(%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)		10+Is
Bandwidth BW(KHZ)	@-3dB,IPN	DC-200
Insulation voltage Vd(KV)	@50/60Hz, 1min,AC	2.5

General data:

Parameter	Value
Operating temperature TA(°C)	-40 ~ +85
Storage temperature TS(°C)	-55 ~ +125
Mass M(g)	12
Plastic material	PBT G30/G15, UL94- V0;
Standards	IEC60950-1:2001
	EN50178:1998
	SJ20790-2000

Dimensions(mm):

					<p>Connection</p>				
<p>Size of primary pin & Distance (mm)</p>					<p>General tolerance</p>				
Type	05LX	10LX	15LX	25LX	<p>General tolerance: <math>\pm 0.2\text{mm}</math></p>				
*a	1.3	1.4	1.6	1.6	<p>size of Primary pin : *d (Find the electrical data) ;</p>				
*d	1.0	1.0	1.0	1.4	<p>Secondary pin:3pin 0.25*0.5;</p>				

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 <math>< 100^{\circ}\text{C}</math>.

WARNING : Incorrect wiring may cause damage to the sensor.



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.