



DATA SHEET

Hall Effect Current Sensor

PN: CHK_LB5S2

IPN=50 ~ 300A

Feature

- Open-loop
- Capable measurement of currents: DC, AC,pulse with galvanic isolation between primary circuit and secondary circuit.
- Supply voltage: DC +5.0V

Advantages

- Excellent accuracy
- Easy installation
- Optimized response time, no insertion losses
- High immunity to external interference
- Low temperature drift
- Very good linearity
- Can be customized

Applications

- Photovoltaic (PV) current applications
- 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)

Parameter	Ref	CHK50LB5S2	CHK100LB5S2	CHK200LB5S2	CHK300LB5S2
Rated input Ipn(A)		50	100	200	300
Measuring range Ip(A)		0 ~ ±50	0 ~ ±100	0 ~ ±200	0 ~ ±300
Output voltage Vo(V)			2.500±2.000*(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		< ±1.0	
Offset voltage VOE(mV)		@IP=0,T=25°C		< ±30	
Temperature variation of VOE VOT(mV/°C)		@IP=0,-40 ~ +85°C		< ±1.0	
Linearity error er(%FS)				< 1.0	
Di/dt accurately followed (A/μs)				> 100	
Response time tra(μs)		@90% of IPN		<3.0	
Power consumption IC(mA)				15	
Bandwidth Bw(KHZ)		@-3dB, IPN		DC-20	
Insulation voltage Vd(KV)		@50/60Hz, 1min,AC		2.5	

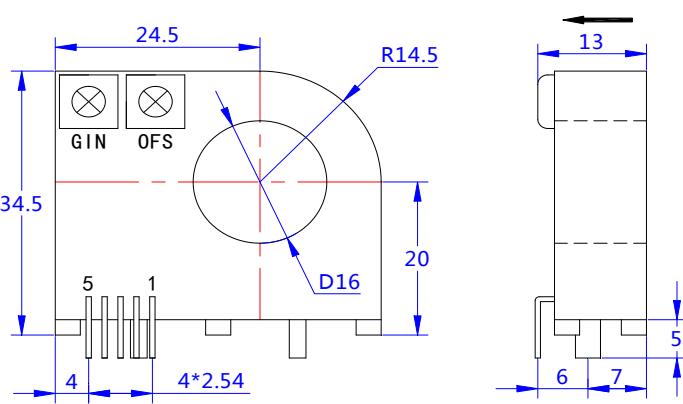
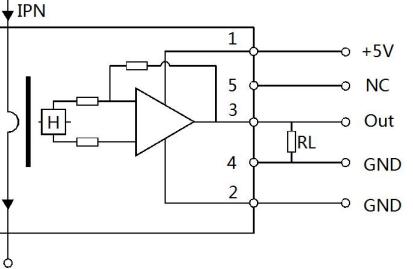
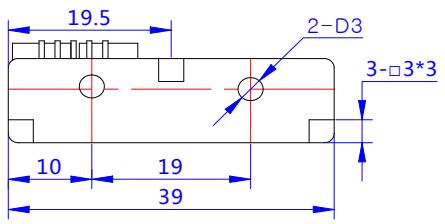


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General data:	
Parameter	Value
Operating temperature TA(°C)	-40 ~ +85
Storage temperature TS(°C)	-55~ +125
Mass M(g)	25
Plastic material	PBT G30/G15, UL94- V0;
Standards	IEC60950-1:2001 EN50178:1998 SJ20790-2000

Dimensions(mm):	
	<p>Connection</p> 
	<p>General tolerance</p> <p>General tolerance:< ±0.5mm Primary through-hole : D16.0±0.15 Connection of secondary : 5pin 0.635*0.635</p>

Remarks:
<ul style="list-style-type: none"> ➤ 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 if fully filled with. ➤ The primary conductor should be <100°C.

WARNING : Incorrect wiring may cause damage to the sensor.

