DATA SHEET
Hall Effect Current Sensor

PN: CHK_LB5S2 | **IPN=50 ~ 300A**

Feature

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

Advantages

- Excellent accuracy
- Easy installation
- Optimized response time, no insertion losses
- High immunity to external interference
- Low temperature drift

Applications

- Photovoltaic (PV) current applications
- AC/DC variable-speed drive
- Uninterruptible Power Supplies (UPS)
- Switched Mode Power Supplies (SMPS)
- Inverter applications

ISO 14001

RoHS

CE

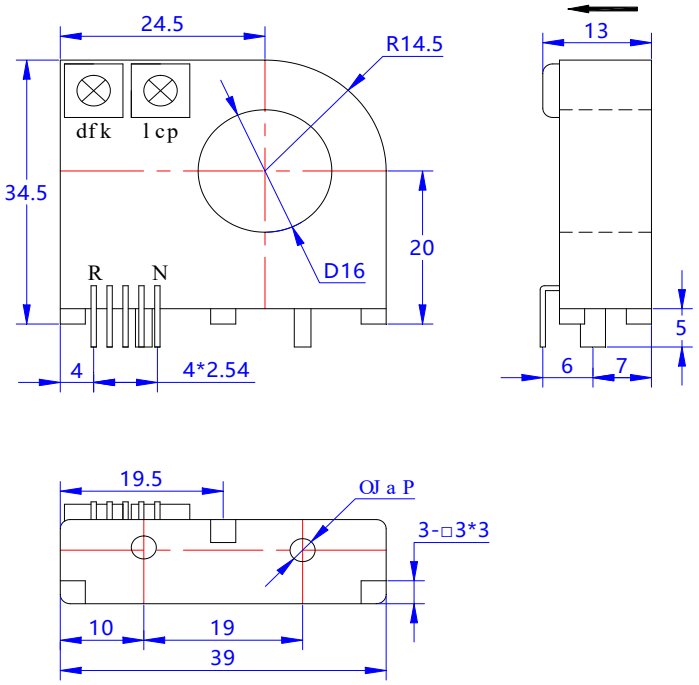
Electrical data：（Ta=25℃， Vc=+5.0VDC,RL=2KΩ）

Parmeter \ 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 εr(%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		

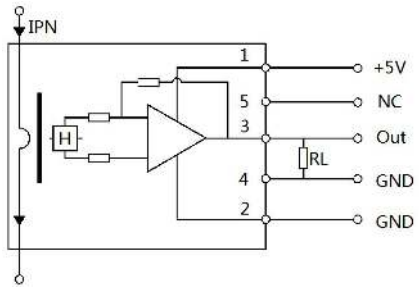
General data:

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):



Connection



General tolerance

General tolerance:< ±0.5mm

Primary through-hole：D16.0±0.15

Connection of secondary :
5pin 0.635*0.635

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 if fully filled with.
- The primary conductor should be <100°C.

WARNING : Incorrect wiring may cause damage to the sensor.