DATA SHEET
Hall Effect Current Sensor

PN: CHK-LFTB5S2L | **I_{PN}=200-800A**

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

- High accuracy
- Very good linearity
- Low temperature drift
- Optimized response time, no insertion losses
- High immunity to external interference
- High performance Hall for automotive products

Applications

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

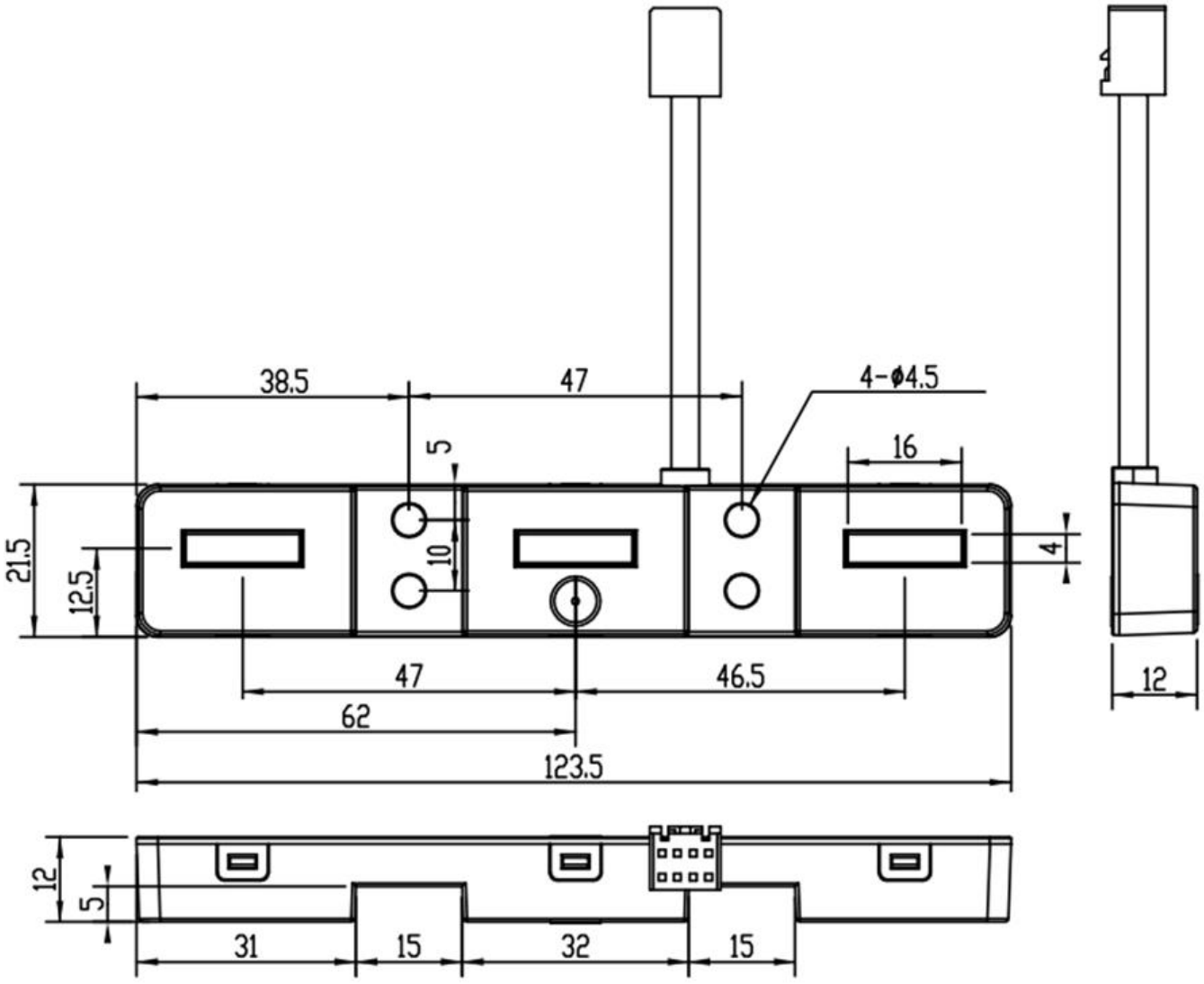
CE RoHS

Electrical data：（Ta=25℃，Vc=+5.0VDC,R_L=10.0KΩ）

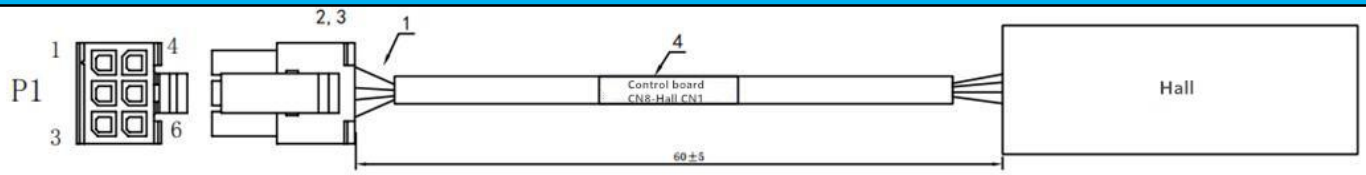
Parameter Ref	CHK100LFTB 5S2L	CHK200LFTB 5S2L	CHK400LFTB 5S2L	CHK600LFTB 5S2L	CHK800LFTB 5S2L
Rated input Ipn(A)	100	200	400	600	800
Measuring range Ip(A)	±110	±220	±440	±660	±800
Output offset voltage Vo(V)	@I_P=0,T_A=25℃	V_C/2±0.020			
Output voltage Vo(V)	@I_P,T_A=25° C	V_C/2±2.000*(I_P/I_{PN})			
Supply voltage Vc(V)	+5.0 ±5%				
Accuracy X_G(%)	2% @25℃±5℃ ; 3% @-40～125℃				
Hysteresis offset voltage V_{OH}(mV)	@I_P=0, after 1*I_{PN}	≤10			
Temperature variation of V_{OE} V_{OT}(mV/°C)	@I_P=0,T_A=-40～+125° C	< ±0.15			
Linearity error εr(%FS)	@I_P=±I_{PN},T_A=25° C	< 1.0			
Response time t_{ra}(μs)	@90% of Ipn	<5.0			
Power consumption Ic(mA)	<30				
Bandwidth Bw(KHZ)	@-3dB,I_{PN}	DC-30			
Insulation voltage Vd(KV)	@50/60Hz, 1min,AC	4.0			

General data：	
Parameter	**Value**
Operating temperature TA(°C)	-40 ~ +125
Storage temperature TS(°C)	-40 ~ +125
Mass M(g)	
Plastic material	PBT G30/G15，UL94- V0;
Standards	IEC60950-1:2001
	EN50178:1998
	SJ20790-2000, JB/T7490-2007

Dimensions(mm):



Connection & Wiring:



PIN No.	Terminal connection definition
P1-6	GND
P1-3	+5V
P1-4	W-phase output
P1-1	V-phase output

No.	Product	Description	Quantity	Unit	Brand
1	Cable	Multi core wire 24AWG * 4C, black	1	PCS	/
2	Terminal	43030-0001	4	PCS	Molex
3	Connector (housing)	43025-0600	1	PCS	Molex

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.