DATA SHEET
DC Leakage Current Sensor

PN: CHD_LCT15D5 | **IPN=10~100mA**

Feature

- DC Leakage Current Sensor develops on base of magnetic modulation closed loop principle
- Apply unique patented technology for measure tiny current (mA level)
- This sensor is used to measure current of signal system, circuit, and leakage monitoring system, as well as to measure current difference.
- Supply voltage: DC ±12~15 V

Advantages

- High accuracy
- Easy installation
- Wide current measuring range
- Optimized response time
- Low power consumption
- High immunity to external interference
- Very good linearity
- Can be customized

Applications

- The current detection of the lift
- DC panel detection
- The signal system
- Current differential detection
- AC variable-speed drive/ Servo drive
- UPS and Inverter applications

CE RoHS

Electrical data：（Ta=25℃， Vc= ±15VDC）

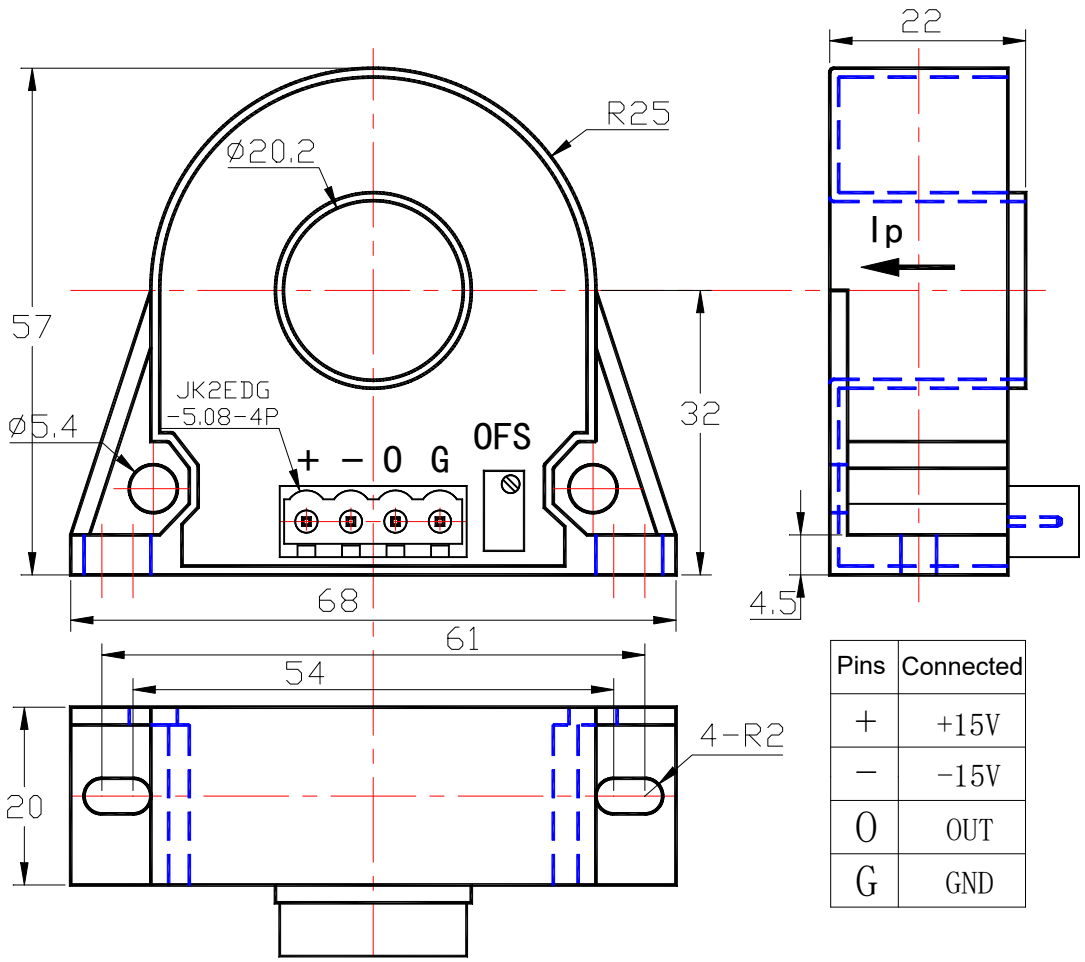
Parmeter Ref	CHD10 LCT15D5	CHD20 LCT15D5	CHD30L CT15D5	CHD40L CT15D5	CHD50L CT15D5	CHD100 LCT15D5	CHD1000 LCT15D5
Rated input Ipn	±10mA DC	±20mA DC	±30mA DC	±40mA DC	±50mA DC	±100 mA DC	±1000 mA DC
Measuring range Ip	0～±15mA	0～±30mA	0～±45mA	0～±60mA	0～±75mA	0～±150mA	0～±1500mA
Turns ratio(Np/Ns) (T)	1:50	1:100	1:150	1:200	1:250	1:400	1:400
Output voltage Vo(V)	@Ip=±Ipn ±5±0.5%						
Supply voltage V_C(V)	(±12~±15) ±5%						
Accuracy X_G(%)	@I_{PN},T=25°C ≤±1						
Offset voltage V_{OE}(mV)	@I_P=0,T=25°C <±50						
Offset voltage drift V_{OT}(mV/°C)	@I_P=0,-40～+85°C ≤±1.5						
Linearity error εr(%FS)	≤1.0						

Response time tra(mS)	≤60	≤35
Consumption current (mA)	20+IpX(Np/Ns)	
Insulation voltage Vd(KV)	@50/60Hz, 1min,AC 2.5	

General data：

Parameter	Value
Operating temperature TA(°C)	-40 ~ +85
Storage temperature TS(°C)	-40~ +125
Mass M(g)	99
Plastic material	PBT G30/G15, UL94- V0;
Standards	IEC60950-1:2001
	EN50178:1998
	SJ20790-2000

Dimensions(mm):



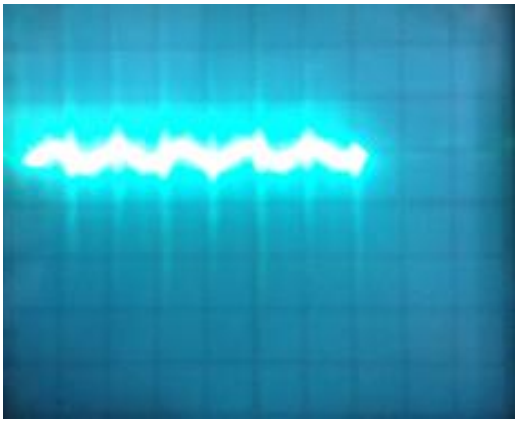
Pins	Connected
+	+15V
−	−15V
O	OUT
G	GND

General tolerance:< ±0.5mm

Primary through-hole： D20.2±0.15mm

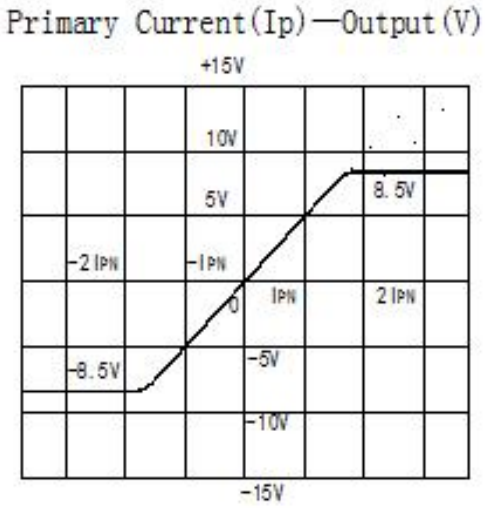
Characteristics chart:

Characteristic of Output Noise Voltage



输出噪声电压
(Noise voltage)

Input Current-Output Voltage



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.