



DATA SHEET

Hall Effect Current Sensor

PN: CHK_HAT15D4

IPN=200-1500A

Feature

- Open- loop
- Capable measurement of currents: DC, AC,pulse with galvanic isolation between primary circuit and secondary circuit.
- Supply voltage: DC $\pm 12\sim 15V$
- Removable structure

Advantages

- High accuracy
- Easy installation
- No insertion losses
- Low power consumption
- Wide current measuring range
- High immunity to external interference
- Very good linearity
- Can be customized

Applications

- Inverter applications
- AC/DC variable-speed drive
- Uninterruptible Power Supplies (UPS)
- Switched Mode Power Supplies (SMPS)
- Frequency drive control home appliances



RoHS



Electrical data: (Ta=25°C, Vc=±15VDC,RL=10KΩ)

Ref Parmeter	CHK200 HAT15D4	CHK400 HAT15D4	CHK800 HAT15D4	CHK1000 HAT15D4	CHK1200 HAT15D4	CHK1500 HAT15D4
Rated input Ipn(A)	200	400	800	1000	1200	1500
Measuring range Ip(A)	0~±600	0~±1200	0~±2400	0~±2500	0~±2500	0~±2500
Output voltage Vo(V)	±4.0*(IP/IPN)					
Load resistance RL(KΩ)	>10					
Supply voltage VC(V)	(±12~±15)±5%					
Accuracy XG(%)	@IPN,T=25°C		< ±1.0			
Offset voltage VOE(mV)	@IP=0,T=25°C		< ±25			
Temperature variation of VOE VOT(mV/°C)	@IP=0,-40 ~ +85°C		< ±1.0			
Hysteresis offset voltage VOH(mV)	@IP=0,after 1*IPN		< ±25			
Linearity error εr(%FS)	< 1.0					
Di/dt accurately followed (A/μs)	> 100					
Response time tra(μs)	@90% of IPN		<5.0			
Power consumption IC(mA)	15					
Bandwidth Bw(KHZ)	@-3dB, IPN		DC-20			



Insulation voltage Vd(KV)	@50/60Hz, 1min,AC	5.0
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General data:

Parameter	Value
Operating temperature TA(°C)	-40 ~ +85
Storage temperature TS(°C)	-55 ~ +125
Mass M(g)	300
Plastic material	PBT G30/G15, UL94- V0;
Standards	IEC60950-1:2001
	EN50178:1998
	SJ20790-2000

Dimensions(mm):

	Connection
	General tolerance
General tolerance: $\pm 0.5\text{mm}$ Primary through-hole : 30.5*40.5±0.20 Connection of Secondary : 2510-04A (Instead of Molex 5045-04A)	

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.

