



# DATA SHEET

## Hall Effect Current Sensor

PN: **CHK\_F15D4H**

IPN=**200-2000A**

### 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: ( $T_a=25^{\circ}C$ , $V_c=\pm 15VDC, R_L=10K\Omega$ )

Ref Parameter	CHK200 F15D4H	CHK400 F15D4H	CHK800 F15D4H	CHK1000 F15D4H	CHK1200 F15D4H	CHK2000 F15D4H
Rated input $I_{pn}(A)$	200	400	800	1000	1200	2000
Measuring range $I_p(A)$	0 $\sim$ $\pm 400$	0 $\sim$ $\pm 800$	0 $\sim$ $\pm 1600$	0 $\sim$ $\pm 2000$	0 $\sim$ $\pm 2400$	0 $\sim$ $\pm 3000$
Output voltage $V_o(V)$	$\pm 4.0*(IP/IPN)$					
Load resistance $R_L(K\Omega)$	$>10$					
Supply voltage $V_C(V)$	$(\pm 12\sim \pm 15) \pm 5\%$					
Accuracy $X_G(\%)$	@IPN, $T=25^{\circ}C$		$< \pm 0.5$			
Offset voltage $VOE(mV)$	@IP=0, $T=25^{\circ}C$		$< \pm 20$			
Temperature variation of VOE $VOT(mV/^{\circ}C)$	@IP=0, $-40 \sim +85^{\circ}C$		$< \pm 1.0$			
Hysteresis offset voltage $VOH(mV)$	@IP=0, after 1*IPN		$< \pm 20$			
Linearity error $\epsilon_r(\%FS)$	$< 0.5$					
Di/dt accurately followed ( $A/\mu s$ )	$> 100$					
Response time $t_{ra}(\mu s)$	@90% of IPN		$< 5.0$			
Power consumption $I_C(mA)$	15					



# Cheemi Technology Co., Ltd

Bandwidth Bw(KHZ)	@-3dB, IPN	DC-20
Insulation voltage Vd(KV)	@50/60Hz, 1min,AC	5.0

## General data:

Parameter	Value
Operating temperature TA(°C)	-40 ~ +85
Storage temperature TS(°C)	-55~ +125
Mass M(g)	235
Plastic material	PBT G30/G15, UL94- V0;
Standards	IEC60950-1:2001
	EN50178:1998
	SJ20790-2000

## Dimensions(mm):

**Connection**

**General tolerance**

General tolerance: <math>\leq \pm 0.5\text{mm}</math>  
 Primary through-hole :  $12.5 \times 41 \pm 0.20$   
 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 if fully filled with.
- The primary conductor should be <math>< 100^\circ\text{C}</math>.

WARNING : Incorrect wiring may cause damage to the sensor.

