



# DATA SHEET

## Hall Effect Current Sensor

**PN: CHK\_K15D4**

**IPN=400-2000A**

### 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: (Ta=25°C, Vc=±15VDC,RL=10KΩ)

Parameter \ Ref	CHK400 K15D4	CHK600 K15D4	CHK800 K15D4	CHK1000 K15D4	CHK1200 K15D4	CHK2000 K15D4
Rated input Ip(A)	400	600	800	1000	1200	2000
Measuring range Ip(A)	0~±800	0~±1200	0~±1600	0~±2000	0~±2400	0~±3000
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 $\epsilon_r$ (%FS)	< 1.0					
Di/dt accurately followed (A/μs)	> 100					
Response time $\tau_a$ (μs)	@90% of IPN		<7.0			
Power consumption IC(mA)	15					
Bandwidth Bw(KHZ)	@-3dB, IPN		DC-20			
Insulation voltage Vd(KV)	@50/60Hz, 1min,AC		6.0			



## General data:

Parameter	Value
Operating temperature TA(°C)	-40 ~ +85
Storage temperature TS(°C)	-55 ~ +125
Mass M(g)	200
Plastic material	PBT G30/G15, UL94- V0;
Standards	IEC60950-1:2001
	EN50178:1998
	SJ20790-2000

## Dimensions(mm):

<p><b>CHK-K15D4S</b></p> <p><b>CHK-K15D4M</b></p> <p>6-R5</p> <p>4-R5</p> <p>2-D5</p>	<p style="text-align: center;">Connection</p> <p style="text-align: center;">General tolerance</p> <p>General tolerance: &lt;math&gt;\pm 0.5\text{mm}&lt;/math&gt;            Primary through-hole : 16*64±0.3            Connection of Secondary :            CHK-K15D4M:2510-04A            CHK-K15D4S:DG350-3.5-04P</p>
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## 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.**

