



DATA SHEET

Hall Effect Current Sensor

PN: CHK_BS15D4H

IPN=50-600A

Feature

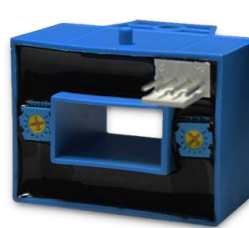
- Open- loop
- Capable measurement of currents: DC, AC, pulse with galvanic isolation between primary circuit and secondary circuit.
- Supply voltage: DC $\pm 12\sim 15V$

Advantages

- Excellent 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: ($T_a=25^\circ C$, $V_c=\pm 15.0VDC$, $R_L=1.0K\Omega$)

Parameter	Ref	CHK50 BS15D4H	CHK100 BS12D4H	CHK200 BS12D4H	CHK300 BS12D4H	CHK400 BS12D4H	CHK600 BS12D4H
Rated input $I_{pn}(A)$		50	100	200	300	400	600
Measuring range $I_p(A)$		0 $\sim\pm 150$	0 $\sim\pm 300$	0 $\sim\pm 600$	0 $\sim\pm 900$	0 $\sim\pm 900$	0 $\sim\pm 900$
Output voltage $V_o(V)$		$\pm 4.0*(IP/IPN)$					
Load resistance $R_L(K\Omega)$		>1.0					
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 $V_{OE}(mV)$		@IP=0, $T=25^\circ C$		$< \pm 20$			
Temperature variation of VOE $V_{OT}(mV/^\circ C)$		@IP=0, $-40 \sim +85^\circ C$		$< \pm 1.0$			
Hysteresis offset voltage $V_{OH}(mV)$		@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		< 3.0			
Power consumption $I_C(mA)$		15					



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Bandwidth Bw(KHZ)	@-3dB, IPN	DC-20
Insulation voltage Vd(KV)	@50/60Hz, 1min,AC	2.5

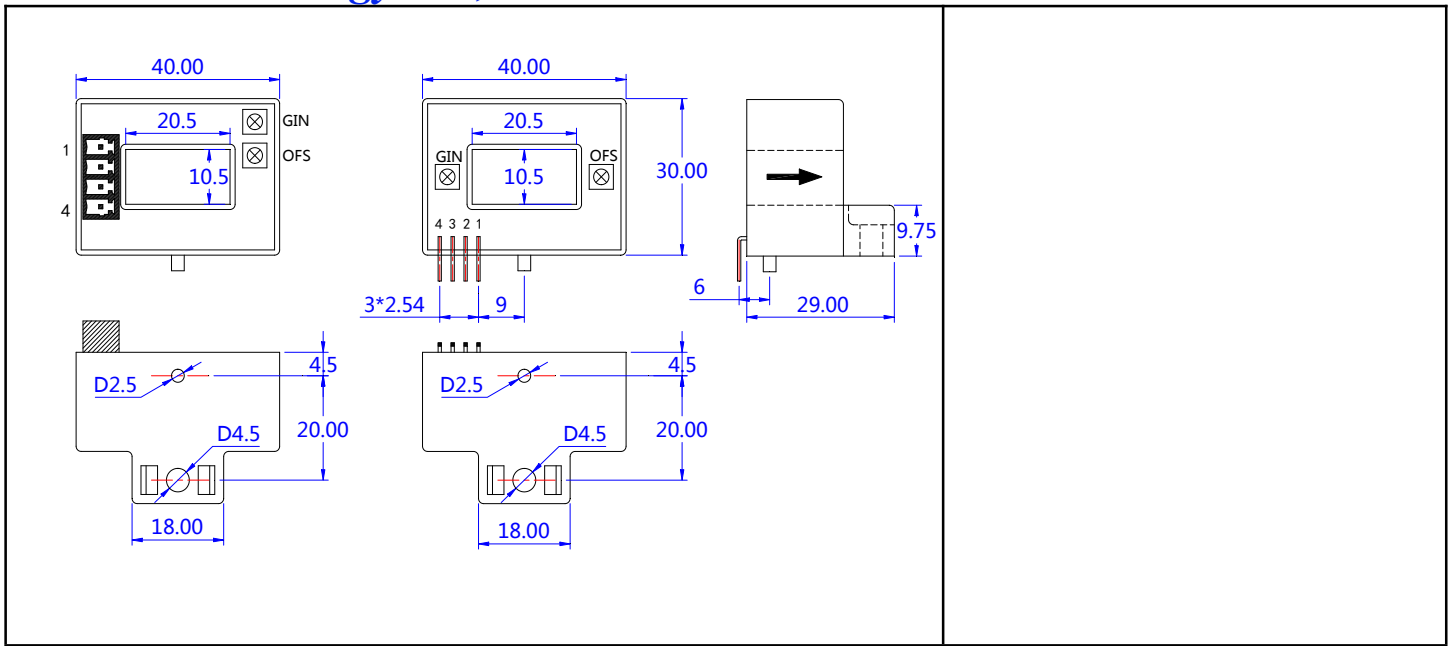
General data:

Parameter	Value
Operating temperature TA(°C)	-40 ~ +85
Storage temperature TS(°C)	-55~ +125
Mass M(g)	65
Plastic material	PBT G30/G15, UL94- V0;
Standards	IEC60950-1:2001
	EN50178:1998
	SJ20790-2000

Dimensions(mm):

CHK_BS15D4HA	CHK_BS15D4HB	Connection
		<p>General tolerance</p> <p>General tolerance: <math>\leq \pm 0.5\text{mm}</math> Primary through-hole : $10.5*20.5 \pm 0.3$ Connection of Secondary : CHK_BS15D4HA/B: 2510-04A (Instead of Molex 5045-04A) CHK_BS15D4HC: 15EDGK3.81-04P CHK_BS15D4HD: 4pin 0.65*0.65mm</p>
CHK_BS15D4HC	CHK_BS15D4HD	





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 <100°C.

WARNING : Incorrect wiring may cause damage to the sensor.

