

DATA SHEET

Hall Effect Current Sensor



PN: CHK_LTK15D4

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

- High accuracy
- Easy installation
- No insertion losses
- Low power consumption
- Wide current measuring range
- High immunity to external interference

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 Parmeter	CHK50 LTK15D4	CHK100 LTK15D4	CHK200 LTK15D4	CHK300 LTK15D4	CHK400 LTK15D4	CHK600 LTK15D4
Rated input $I_{pn}(A)$	50	100	200	300	400	600
Measuring range $I_p(A)$	0 \sim ± 150	0 \sim ± 300	0 \sim ± 600	0 \sim ± 900	0 \sim ± 900	0 \sim ± 900
Output voltage $V_o(V)$	$\pm 4.0*(I_p/IPN)$					
Load resistance $R_L(K\Omega)$	>10					
Supply voltage $V_C(V)$	$(\pm 12\sim 15) \pm 5\%$					
Accuracy $X_G(\%)$	@IPN, $T=25^{\circ}C$		$< \pm 1.0$			
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 $\epsilon_r(\%FS)$	< 1.0					
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					

Bandwidth Bw(KHZ)	@-3dB, IPN	DC-20
Insulation voltage Vd(KV)	@50/60Hz, 1min,AC	3.0

General data:

Parameter	Value
Operating temperature TA(°C)	-40 ~ +85
Storage temperature TS(°C)	-55~ +125
Mass M(g)	70
Plastic material	PBT G30/G15, UL94- V0;
Standards	IEC60950-1:2001
	EN50178:1998
	SJ20790-2000

Dimensions(mm):

CHK-LTK15D4M	CHK-LTK15D4S	Connection
		<p>General tolerance</p> <p>General tolerance: <math>\pm 0.5\text{mm}</math></p> <p>Primary through-hole: $D 20.0 \pm 0.15$</p> <p>Connection of Secondary :</p> <p>CHK-LTK15D4M: 2510-04A</p> <p>CHK-LTK15D4S: 15EDGK3.81-04P</p>

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 $<100^{\circ}\text{C}</math>.$

WARNING : Incorrect wiring may cause damage to the sensor.