

DATA SHEET Hall Effect Current Sensor

P/N: CHB1000LTC15D250SFC-SP2

 $I_{PN} = 1000A$

Feature

- Closed- loop (compensated) current transducer
- Supply voltage: DC ±15~24V Capable measurement of currents: DC, AC, pulse with galvanic isolation between primary circuit and secondary circuit.

Advantages

- High accuracy
- Easy installation
- Low temperature drift
- Optimized response time
- High immunity to external interference



- Very good linearity
- Can be customized



Applications

- The application of variable frequency electrical appliances
- AC/DC variable-speed drive
- Uninterruptible Power Supplies (UPS)
- Switched Mode Power Supplies (SMPS)
- Inverter applications



RoHS



Electrical data: (Ta=25°C, Vc=±15VDC)				
Ref Parmeter	CHB1000LTC15D250SFC/SP2	CHB1000LTC15D200SFC/SP2		
Rated input Ipn(A)	1000	1000		
Measuring range Ip(A)	0 ~ ±3000	0 ~ ±2400		
Turns ratio Np/N _s (T)	1:4000	1:5000		
Output current rms I _s (mA)	Ip/Ns	Ip/Ns		
Secondary coil resistance $R_S(\Omega)$	26	45		
Inside resistance $R_{M}(\Omega)$	$R_{\text{M max}} = N_{\text{S}} \frac{\text{Vc}_{\text{min}} - 0.5 \text{ V}}{I_{\text{P}}} - R_{\text{S max}} - 1.1 \Omega$			
Supply voltage V _C (V)	(±15 ~ ±24) ±5%			
Accuracy XG(%)	$@I_{PN},T=25^{\circ}C$ < ±0.4			
Offset current I _{OE} (mA)	$@I_P=0,T=25^{\circ}C$ < ± 0.5			
Temperature variation of I_{OE} $I_{OT}(mA/^{\circ}C)$	$@I_P=0,-40 \sim +85^{\circ}C$ < ±0.5			
Linearity error εr(%FS)	< 0.1			

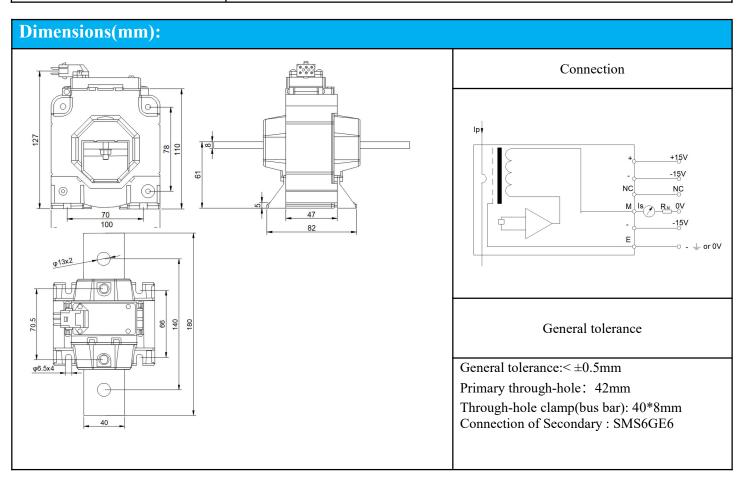


Cheemi Technology Co., Ltd Tel: 025-85996365 E-mail: info@cheemi-tech.com www. cheemi-tech.com Add:N22, Xianlongwan, Xianyin South Road, Qixia District, Nanjing - China.

Cheemi Technology Co., Ltd

Di/dt (A/μs)		> 100	
Response time tra(µs)	@90% of I _{PN}	< 1.0	
Power consumption I _C (mA)		<32+Is	
Bandwidth BW(KHZ)	@-1dB, I _{PN}	DC-100	
Insulation voltage Vd(KV)	@50/60Hz, 1min,AC	10.0	

General data:					
Parameter	Value				
Operating temperature TA(°C)	- 50∼ +85				
Storage temperature TS(°C)	-55~	-55~ +90			
Mass M(g)	/	/			
Plastic material	PBT G30/G15, UL94- V0;				
	IEC60950-1:2001				
Standards	EN50178:1998				
	SJ20790-2000				



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 <100°C.



Cheemi Technology Co., Ltd

WARNING: Incorrect wiring may cause damage to the sensor.

