SHAANXI SHINHOM ENTERPRISE CO.,LTD

HBC25C04 Hall-effect Current Sensor Series

HBC25C04 series is a new generation of current sensor based on the principle of Hall-effect. It can be used for detecting DC、 pulse and various irregular waveform current under electrical isolation between output and input.

Electrical characteristics

	Type	HBC25C04		
I_{PN}	Primary nominal input current	25		A
I_P	Measuring primary current range	0～±55		A
I_{SN}	Nominal output current	25		mA
K_N	Turns ratio	1-2-3-4：1000		
R_M	Measurement resistance (V_c=±15V)	I_P =±25A 100-360	I_P =±36A 100-190	Ω
V_C	Supply voltage	±12～±15（±5%）		V
I_C	Current loss	V_C=±15V	10+Is	mA
V_d	Insulation voltage	5KV AC/50Hz/1min		

Dynamic characteristics

ε_L	Linearity	<0.1	%FS
X	Precision	T_A =25℃ V_C=±15V ±0.7	%
I_0	Offset current	T_A =25℃ <±0.15	mA
I_{OM}	Residual current	I_P→0 <±0.15	mA
I_{OT}	Offset current temperature drift	I_P=0 T_A =–25～+70℃ ±0.1～±0.65	mA/℃
T_R	Response time	<1	μs
f	Band width（-3dB）	DC~200	KHz

Generic characteristics

T_A	Operation temperature	–40～+85	℃
T_S	Storage temperature	–40～+125	℃
R_P	Primary internal resistance	≤1.25	MΩ
R_S	Secondary internal resistance	40	Ω
R_{IS}	Isolation resistance	≥1500	KΩ
	Standard		

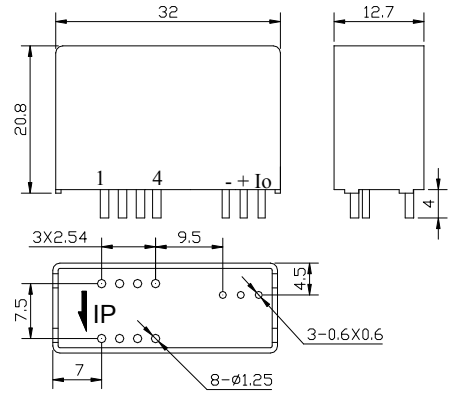
Advantages

- ◆ excellent precision ,good linearity
- ◆ better anti-jamming capability
- ◆ no insertion loss
- ◆ low temperature drift, ,broad frequency band width
- ◆ good current overload capability

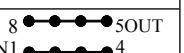
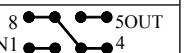
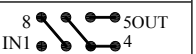
Typical applications

- ◆ measurement and control system
- ◆ alternating current frequency conversion timing system
- ◆ Electric and electron device protection
- ◆ Generator control and protection
- ◆ welding machine, UPS, switching power supplies

package outline（mm）



usage declaration

Turns ratio	Rated current IPN（A）	Peak current IP（A）	Output current IS（mA）	Primary connection
1:1000	25	36	25	
2:1000	12	18	24	
3:1000	8	12	24	
4:1000	6	9	24	

Elucidation：＋：＋15V －：－15V Io：Iout

Http://www.shinhom.com Fax: 029-87851840 Tel: 029-87851838 E-mail:shinhom@globalsources.com