HKC2000F Hall-effect Current Sensor Series

HKC2000F 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	HKC200FA	HKC400FA	HKC800F	HKC100F	HKC2000F	
I_{PN}	Primary nominal input current	200	400	800	1000	2000	A
I_P	Measuring primary current range	400	800	1600	2000	3000	A
V_{SN}	Nominal output voltage	4±1%					V
V_C	Supply voltage	±12~±15（±5%）					V
I_C	Current loss	V_C=±15V	20				mA
V_d	Insulation voltage	5KV AC/50Hz/1min					

Dynamic characteristics

ε_L	Linearity	≤1	%FS
V_0	Offset voltage	T_A =25℃ ±15	mV
V_{OM}	Residual voltage	I_{PN}→0 ±30	mV
V_{OT}	Offset voltage temperature drift	I_P=0 T_A=–10~ +70℃ ±1	mV/℃
T_R	Response time	≤5	μs
f	Band width（-3dB）	DC~20	KHz

Generic characteristics

T_A	Operation temperature	-40~ +85	℃
T_S	Storage temperature	–55~ +125	℃
R_L	Load resistance	≥10	KΩ
	Standard		

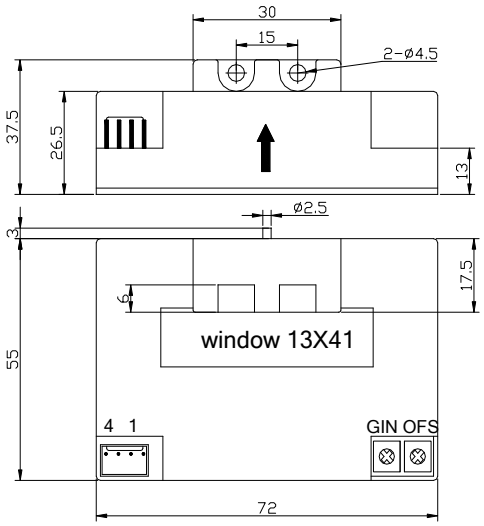
Advantages

- insulation between input and output
- competitive quality /price rate
- no insertion loss
- easy to installation
- small size, light heavy

Typical applications

- overload protection
- electric welding equipment for the control of the welding current
- UPS
- energy control system
- switching power supplies

package outline（mm）



Elucidation：
1：＋15V
2：－15V
3：Vout
4： 0V
OFS：zero adjustment