

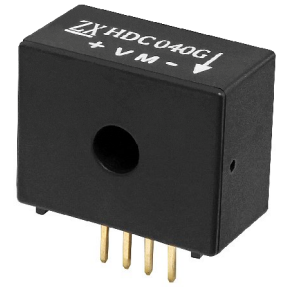
# HDC-040G Series Hall Current Sensor

## Introduction

HDC-040G Series Hall current transducer is the new generation product based on Hall effect. It is able to measure DC, AC, pulse and other currents with irregular waves under the condition of electrical isolation.

## △Electrical Parameters (Ta=25°C)

Type		HDC-010G	HDC-020G	HDC-030G	HDC-040G
Parameters	Symbols				
Nominal measuring current	$I_{PN}$	10A	20A	30A	40A
Linear range	$I_P$	0~±15A	0~±30A	0~±45A	0~±60A
Nominal output voltage	$V_{SN}$	±1V±0.025V			
Zero offset voltage	$V_O$	≤±0.025V( $I_{PN}=0$ )			
Temperature drift of bridge offset	$I_{OT}$	≤±2mV/°C	≤±1mV/°C		
Linear error	$\xi_L$	±1%			
Response time	$T_r$	≤7 μS			
Supply voltage	$V_C$	±15V±5%			
Isolation voltage	$V_d$	2.5KV/50 or 60Hz/1min			
Power dissipation current	$I_C$	±30mA			
Frequency bandwidth	$f$	DC~30KHz(-3dB)			
Operating temperature	$T_a$	-25°C~+85°C			
Storage temperature	$T_s$	-40°C~90°C			



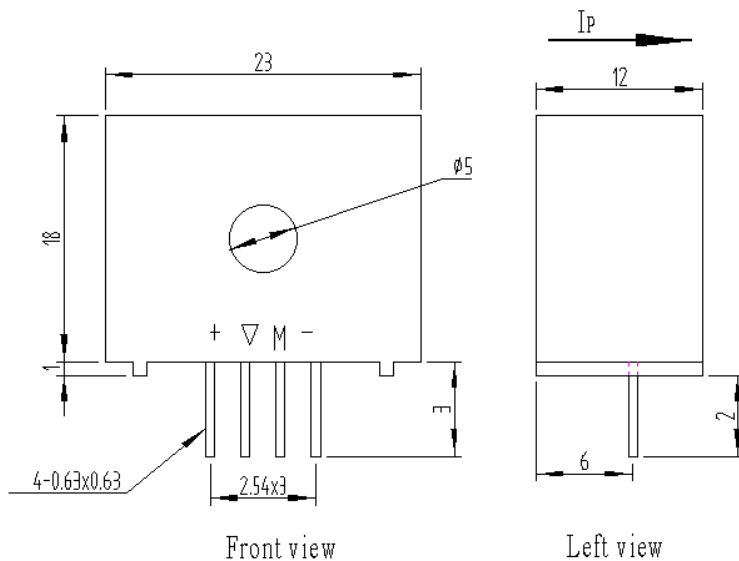
## Features:

- ◆ Use open-loop current transducer based on Hall effect
- ◆ Adopt UL94V-0-recognized insulated casing
- ◆ Small size and space saving
- ◆ Low power consumption
- ◆ High immunity against external disturbance

## Applications:

- ◆ AC variable-frequency speed control system and servo motor
- ◆ Uninterruptible power supply (UPS)
- ◆ Switched-mode power supply
- ◆ Power supply for electric welding machine

## △ Dimensions: (mm)



## Instructions for Use:

- ◆ Connect the wire of transducer in correct way as required.
- ◆ Inputting measured current from punched core of transducer, the in-phase voltage signal can be obtained from output end by sampling.
- ◆ The arrow indicates positive current direction.

## Connection and adjustment:

- ◆ +: +Vc (+15V)
- ◆ ∇: 0V
- ◆ M: Output
- ◆ -: -Vc (-15V)