

HSTS023R

Features

- Low initial offset voltage and sensitivity error (typically 2 mV, 0.3%)
- Low temperature instability
- IP67 waterproof rating
- Built-in overvoltage and ESD protection
- Complies with standard JB/T 7490-2007



Basic Specifications

Type	Value
Rated Input	$\pm 50A$ $\pm 100A$ $\pm 200A$ $\pm 300A$ $\pm 400A$ $\pm 500A$ $\pm 600A$
Input Measurement Range	$\pm 60A$ $\pm 120A$ $\pm 240A$ $\pm 360A$ $\pm 480A$ $\pm 600A$ $\pm 720A$
Rated Output	$2.5V \pm 0.625V$ / $2.5V \pm 2V$

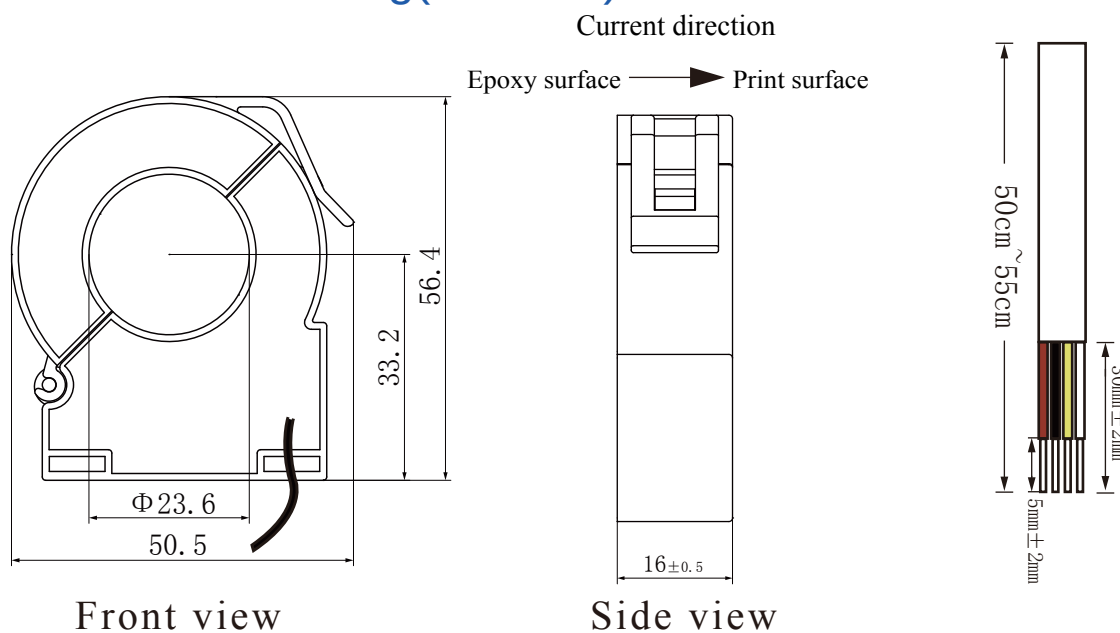
Type	Value	Remarks
Supply Voltage	4.8V ~ 5.2V	
Current Consumption	$\leq 16mA$	
Output Load	$> 10k\Omega$	
Operating Temperature	$-40^{\circ}C \sim +85^{\circ}C$	
Dielectric Strength	2.5KV	50Hz 1min
Weight	84g	

Performance Specifications

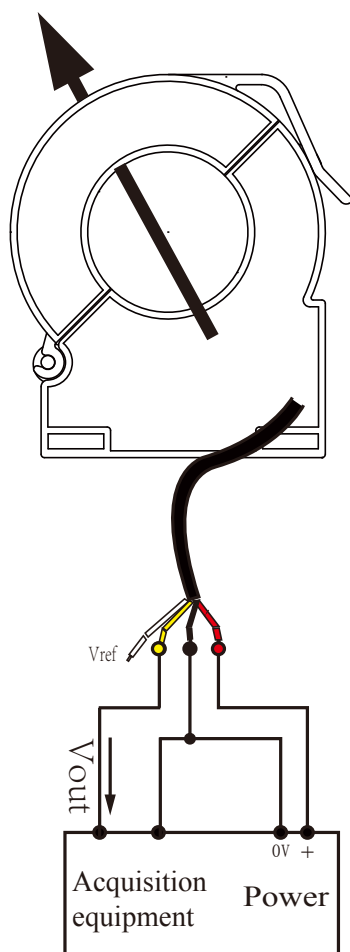
Type	Typical values	Maximum value	Unit	Test Conditions / Remarks
Overall Accuracy				
Accuracy	± 0.5	± 0.8	%	Rated input current, 100% factory testing
Linearity	0.1	—	%	Range: 5% – 120% IPN
Output Characteristics				
Zero-point offset voltage	± 2	± 5	mV	100% Factory Tested
— — Temperature drift	± 0.06	—	mV/°C	Vout -2.5V
Sensitivity Error	± 0.3	—	%	Rated Input Current
— — Temperature drift	± 0.01	—	%/°C	
Reference Voltage Characteristics				
Reference Voltage Error	± 0.5	± 1.25	mV	
— — Temperature drift	0.006	0.015	mV/°C	
Dynamic Performance				
Response Time	5	—	μs	Reach 90% of the final value
Frequency Bandwidth	60	—	kHz	-3dB

Note: Except for temperature-related parameters such as temperature drift and items otherwise specified, the parameters listed above apply to an ambient temperature of 25°C.

Dimensional Drawing(mm±0.5)



Wiring diagram (based on 0V)



Definition of a Lead:

- Red: V+
- Black: 0V
- Yellow: Vout
- White: Vref

Cable :

Cable specification: 0.2mm² four-core shielding wire
 Four-core colors: Red, Black, Yellow, White
 Cable length: 50cm(50cm~55cm)

Calculation formula: $5V \pm 0.625V$ (or $\pm 2V$)

Positive direction: $2.5V + (I/I_{pn}) * 0.625V$ (or $\pm 2V$)

Negative direction: $2.5V - (I/I_{pn}) * 0.625V$ (or $\pm 2V$)

Order Format: Reference Standards

Model + Rated Input Current + Rated Output Voltage + Supply Voltage
 Example: HSTS023R ±100A/2.5V±2V/+5V