

HSTS023R

Features

- Low initial offset voltage and low sensitivity error
- Low temperature drift
- IP67 ingress protection rating
- Built-in overvoltage and ESD protection
- Complies with JB/T 7490-2007



Basic Specifications

Parameter	Value							
Rated Input Current	±50A	±100A	±200A	±300A	±400A	±500A	±600A	
Input Current Measurement Range	±60A	±120A	±240A	±360A	±480A	±600A	±720A	
Rated Output Voltage	2.5V±0.625V / 2.5V±2V							

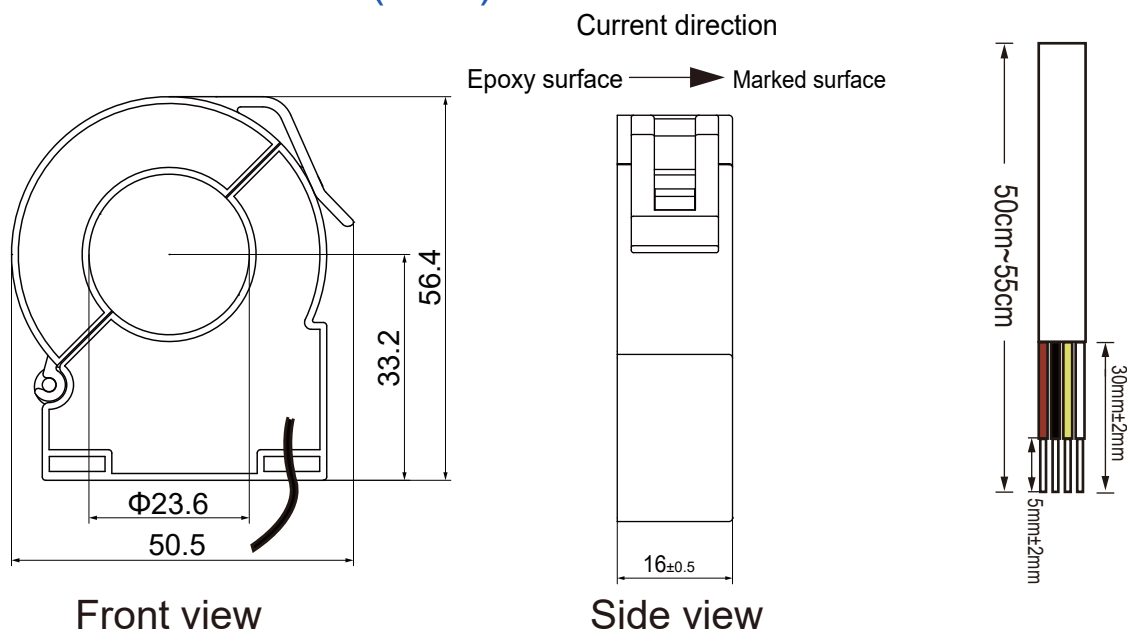
Parameter	Value	Remarks
Supply Voltage	5 V DC(±5%)	
Current Consumption	≤16mA	
Load Resistance	>10kΩ	
Operating Temperature	-40°C~+85°C	
Dielectric Strength	2.5 kV	50 Hz, 1 min
Weight	84 g	

Performance Specifications

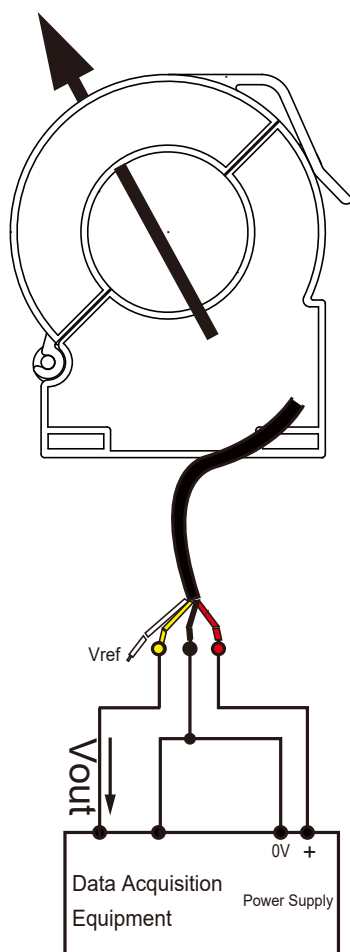
Parameter	Typical Value	Maximum Value	Unit	Test Conditions / Remarks
Overall Accuracy				
Accuracy	-	±0.8	%	Rated input current, 100% factory testing
Linearity	0.1	—	%	Range: 5%~120% IPN
Output Characteristics				
Zero-Current Offset Voltage	-	±5	mV	100% Factory Tested
— —Temperature Drift	±0.06	—	mV/°C	Vout -2.5V
Sensitivity Error	±0.3	—	%	Rated Input Current
— —Temperature Drift	100	—	ppm /°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	Time to reach 90% of the final value
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.

Dimensions in mm (± 0.5)



Wiring Diagram (Referenced to 0 V) Lead Wire Assignments



Red: V+

Black: 0V

Yellow: Vout

White: Vref

Cable

Cable: 4-core shielded cable, 0.2 mm² per conductor

Wire colors: Red, black, yellow, and white

Cable length: 50 cm (50–55 cm)

Output Voltage Calculation: $5V \pm 0.625V$ (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 $\pm 2V$)

Ordering Information

Model + Rated Input Current + Rated Output Voltage + Supply Voltage

Example: HSTS023R $\pm 100A/2.5V \pm 2V/+5V$