

Open-Loop Hall Current Sensor

YCOV50..800BP5



It can be used to measure DC, AC, and pulse current. The primary and secondary circuits are fully insulated. There is no insertion loss.

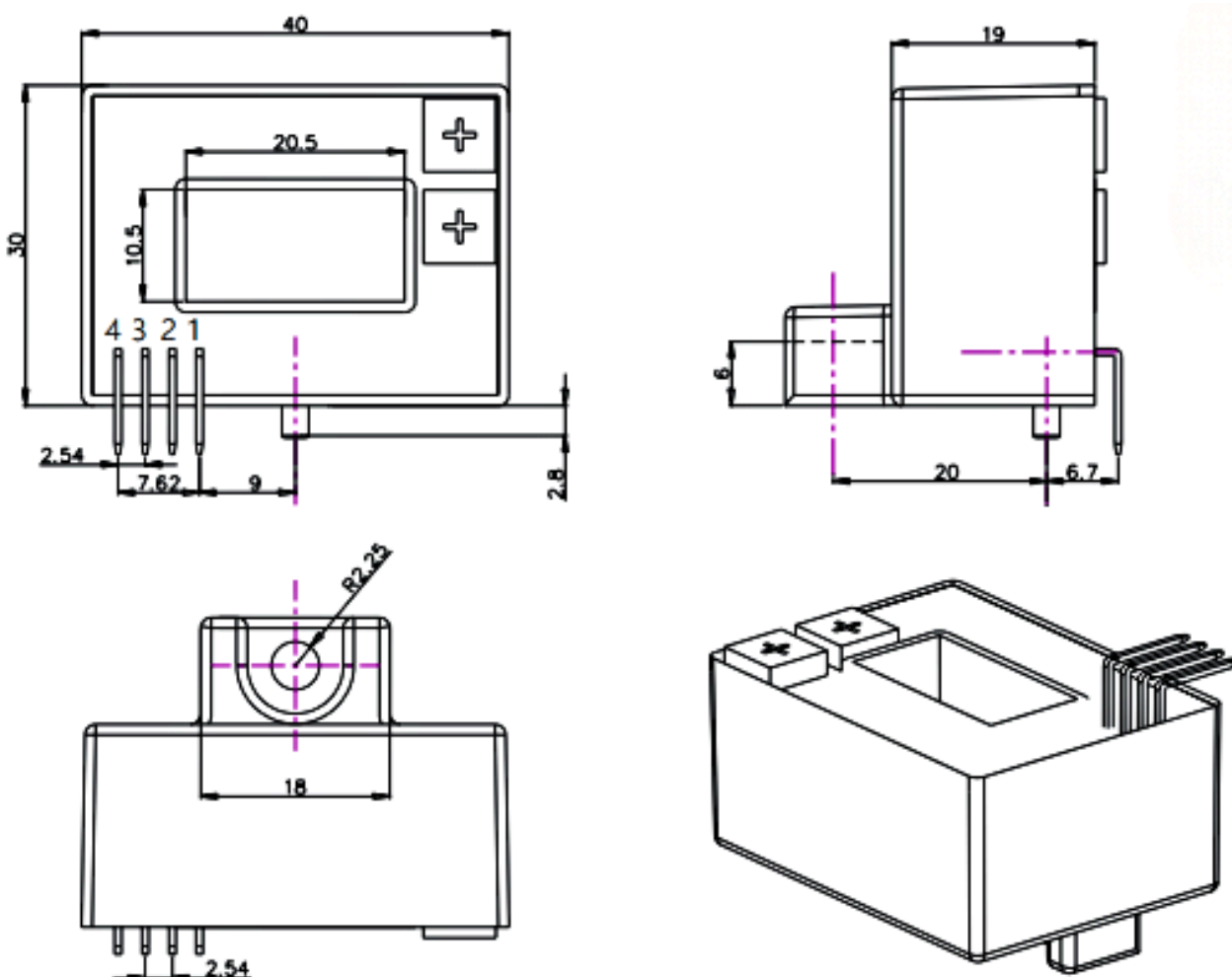
Product Model	Rated Current IPN(A)	Max Measurement Range IPM(A)
YCOV50BP5	50	110
YCOV100BP5	100	220
YCOV200BP5	200	440
YCOV300BP5	300	660
YCOV400BP 5	400	880
YCOV500BP 5	500	1000
YCOV600BP 5	600	1200
YCOV800BP 5	800	1200

Application Area
• Switching Power Supplies
• AC Variable Speed Drives
• Uninterruptible Power Supplies (UPS)
• Testing Equipment
• Instruments and Meters

Executive Standards

- JB/T 7490-2007 Hall Effect Current Sensors
- SJ20790-2000 General Specification for Current and Voltage Sensors

Outline Dimensions and Pin Definition (Unit: mm)



Pin Definition	
1	DC +5V
2	GND
3	Output Pin
4	GND

- General Tolerance: ± 1 mm
- Other Tolerances Standard: GB/T 1804-2000-M

Electrical Parameter Characteristics @ Ta = 25°C

Parameter Description	Symbol	Unit	Test Conditions	Min	Typ	Max
Supply Voltage	Vcc	V	@DC	+4.75V	+5V	+5.25V
Power Consumption Current	Ic	mA	@IIN		15	
Rated Output	VOUT	V	@RL=10K, T=25 ° C		Vout ± 1	
Static Zero Point Output	VOE	V	@Ie=0A, T=25 ° C	2.49	2.5	2.51
Offset Voltage	Voff	mV	@Ie=0A, T=25 ° C	-10	0	10
Load Resistance	RL	Ω	@DC+5V, IIN		10K	
Accuracy	XG	%	@IIN, T=25 ° C		± 1	
Linearity	ε L	%	@IIN, T=25 ° C		± 1	
Current Following Accuracy	dI/dt	A/μs	@IIN	100		
Response Time	TR	μs	@90%IIN			5
Zero Point Output Temp Drift	TCVOE	mV/ ° C	@-40 ° C~+85 ° C, 50A		± 1.5	
			@-40 ° C+85 ° C, 100A800A		± 1	
Rated Output Temp Drift	TCVOUT	mV/ ° C	@-40 ° C~+85 ° C		± 0.7	
Bandwidth	BW	KHz		DC 20		
Operating Temperature Range	TA	° C		-40 ° C	-	+85 ° C
Storage Temperature Range	TS	° C		-45 ° C	-	+105 ° C
Withstand Voltage	Vd	V	@AC50/60Hz 1 min		3000	
Insulation Resistance		Ω	@DC500V	1000M		

Usage Instructions and Precautions

- Refer to the current direction arrow in the structural diagram to connect the current correctly, and pay attention to the forward and reverse directions of the current passing through the sensor.
- Strictly follow the functional pin definitions marked in the structural diagram for wiring (Note: Incorrect wiring may cause damage to the sensor).
- The above specifications are for standard parameter products; products can be customized according to customer requirements.