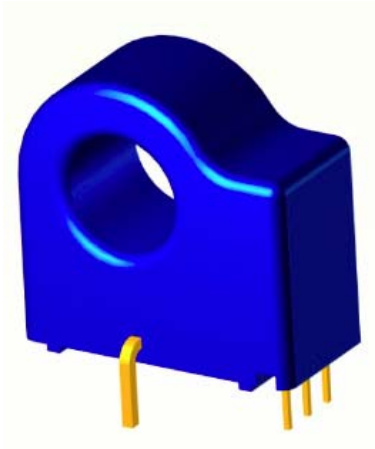


I_{PN} = 10…30A

Features

- Open loop transducer using the Hall effect
- Low voltage application
- Unipolar +5V_{DC} power supply
- Primary current measuring range up to ±10.. ±30A
- Operating temperature range:-40℃< T_A<+85℃
- Output voltage: fully ratio-metric(gain and offset)

Advantages

- High accuracy
- Excellent linearity
- Low temperature drift
- Hermetic package

Industrial applications

- DC motor drives
- Switched Mode Power Supplies(SMPS)
- AC variable speed drives
- Uninterruptible Power Supplies(UPS)
- Battery supplied applications
- Power supplies for welding application

TYPES OF PRODUCTS

Type	Primary nominal current r. m. s I_{PN} (A)	Primary current measuring range I_P (A)
SIOPS10V1	10	±10
SIOPS15V1	15	±15
SIOPS20V1	20	±20
SIOPS25V1	25	±25
SIOPS30V1	30	±30

General Description

For the electronic measurement of currents: DC, AC, pulsed.

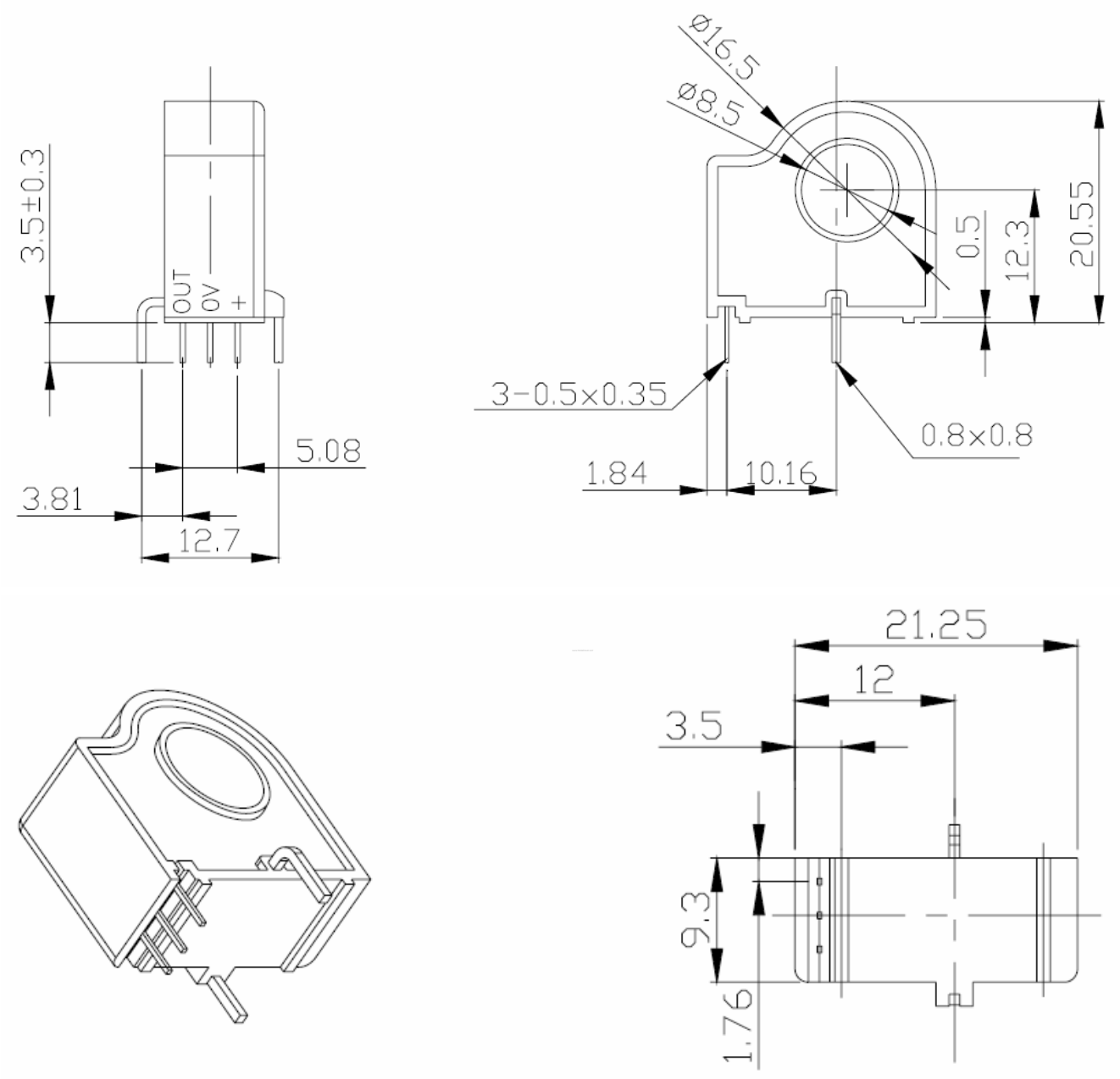
Parameters Table

PARAMETERS	SYMBOL	UNIT	VALUE Min.	VALUE Typ.	VALUE Max.	CONDITIONS
Electrical data						
Supply voltage(±5%)	V_C	V	4.5	5	5.5	
Current consumption	I_C	mA	-	9.2	12	@ T_A = 25°C
Isolation resistance	R_{IS}	MΩ	4.7	-	-	@ 500 VDC
Output Load Resistance	R_L	KΩ	4.7	-	-	@V_{OUT} to V_{CC}
	R_L	KΩ	4.7	-	-	@V_{OUT} to GND
Output Load Capacitance	C_L	nF	-	-	10	@V_{OUT} to GND
Output voltage	V_{out}	V	V_c /5 (2.5+0.2×I_p)@10A V_c /5 (2.5+0.1333×I_p)@15A V_c /5 (2.5+0.1×I_p)@20A V_c /5 (2.5+0.08×I_p)@25A V_c /5 (2.5+0.0666×I_p)@30A			@T_A = 25° C V_{cc}=5V
Accuracy - Dynamic performance data						
Linearity	ε_L	% of I_{PN}		<±1		@T_A = 25°C
Accuracy（I_{PN} = 10...15A）	X	% of I_{PN}		<±2		@T_A = 25°C
Accuracy（I_{PN} = 20...30A）	X	% of I_{PN}		<±1.5		@T_A = 25°C
Quiescent Output Voltage[(1)]	V_{OUTQ}	V		2.5±20mV		@T_A = 25°C B=0
Sensitivity Temperature Coefficient	TCS_{ENS}	%/°C		<±0.025		
Output Resistance	R_{OUT}	Ω		<1		
Output Bandwidth	BW	kH		<50		@-3dB
Response time	t_r	μS		>5 And <8		@ 90% of I_{PN}
Rms voltage isolation test	V_d	kV		<2		@AC 50Hz 1Min
General data						
Ambient operating temperature	T_A	°C		-40 ~ +85		
Ambient storage temperature	T_S	°C		-40 ~ +105		
Mass	m	g		300		

Notes:

1) The indicated offset voltage is the one after the core hysteresis is removed.

Dimensions SIOPSV1 (in mm. 1 mm = 0.0394 inch)



Instructions of use

1) When the test current passes through the sensors you can get the size of the output voltage.(Warning: wrong connection may lead to sensors damage)
2) Based on user needs, the sensors output range can be appropriately regulated.
3) According to user needs, different rated input currents and output voltages of the sensors can be customized.

RESTRICTIONS ON PRODUCT USE

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