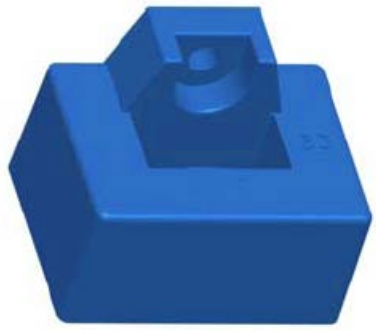


I_{PN} = 50…600A V_{OUT} = ± 4 V

Features

- Hall effect measuring principle
- Galvanic isolation between primary and secondary circuit
- Compact design for PCB mounting
- Low power consumption
- Extended measuring range (3 *IPN)
- Insulated plastic case recognized according to UL 94-V0

Advantages

- Easy installation
- Excellent accuracy
- No insertion losses
- Excellent performance and price
- Only one design for wide current ratings range
- High immunity against external interference

Industrial applications

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

TYPES OF PRODUCTS		
Type	**Primary nominal current r. m. s I_{PN} (A)**	**Primary current measuring range I_P (A)**
SIOY2S50V2	50	±150
SIOY2S75V2	75	±225
SIOY2S100V2	100	±300
SIOY2S150V2	150	±450
SIOY2S200V2	200	±600
SIOY2S300V2	300	±900
SIOY2S400V2	400	±900
SIOY2S500V2	500	±900
SIOY2S600V2	600	±900

General Description

For the electronic measurement of currents : DC, AC, pulsed, mixed, with a galvanic isolation between the primary circuit and the secondary circuit.

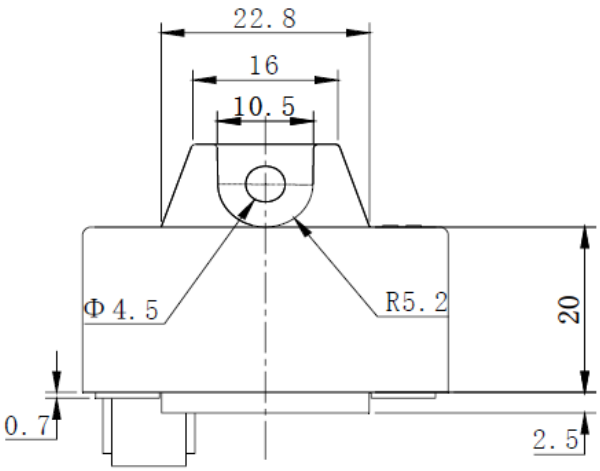
Parameters Table

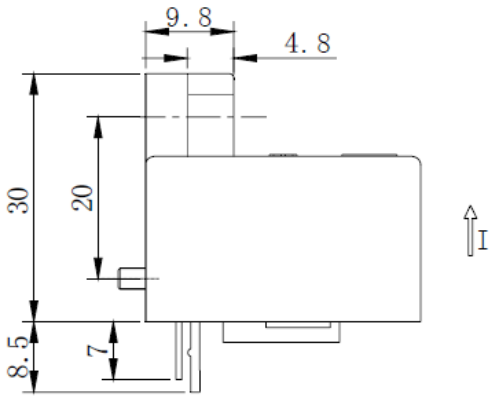
PARAMETERS	SYMBOL	UNIT	VALUE	CONDITIONS
Electrical data				
Supply voltage(±5%)(1)	V_C	V	±15	
Current consumption	I_C	mA	±15	
Output voltage	V_{out}	mV	±4V±40	@ ± I_{PN}, R_L = 10 kΩ, T_A = 25°C
Overload capability(1ms)	I_{PC}	At	50*I_{PN}	
Isolation resistance	R_{IS}	MΩ	>1000	@ 500 VDC
Output internal resistance	R_{OUT}	Ω	100	
Load resistance(2)	R_L	KΩ	>10	
R. m. s voltage for AC isolation test	V_d	KV	3	@50, 1 min
R. m. s rated voltage、safe separation	V_b	V	500	
Accuracy - Dynamic performance data				
Linearity(3)(0…±I_{PN})	ε_L	% of I_{PN}	<±1	
Accuracy	X	% of I_{PN}	<±1.5	@ I_{PN}, T_A = 25°C (excluding offset)
Electrical offset voltage	V_{OE}	mV	<±20	@T_A = 25°C
Hysteresis offset voltage	V_{OH}	mV	<±20	@ I_P= 0 after an excursion of 1* IPN
Temperature coefficient of V_{OE}	TCV_{OE}	mV/K	<±2	@SIOY2S50-75V2
			<±3	@SIOY2S100-600V2
Temperature coefficient of V_{OUT}	TCV_{OUT}	%/K	<±0.1	@% of reading
Response time	t_r	μS	<3	@ 90% of I_{PN} step
d_i/d_t accurately followed	d_i/d_t	A/μS	>50	
Frequency bandwidth(4)	BW	kHz	DC~50	@-3dB
General data				
Ambient operating temperature	T_A	°C	-20 ~ +85	
Ambient storage temperature	T_S	°C	-40 ~ +105	

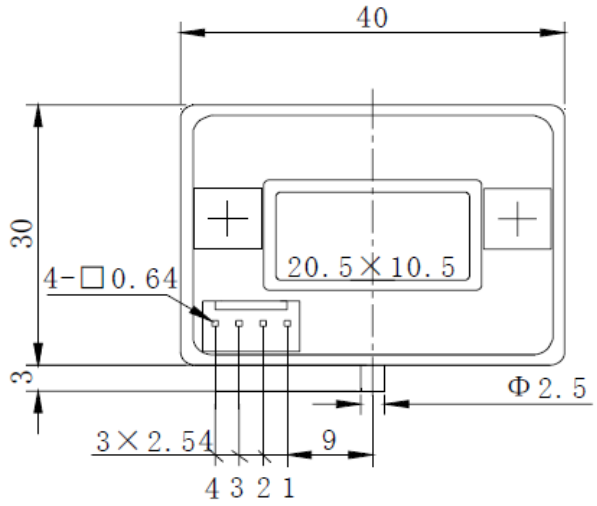
Notes:

1) Operating at ±12V ≤VC<±15V will reduce the measuring range.
2) If the customer uses 1 KΩ of the load resistor, the primary current has to be limited as the nominal. To measure the full defined measuring range, the load resistor should be at minimum 10 KΩ.
3) Linearity data exclude the electrical offset.
4) Please refer to derating curves in the technical file to avoid excessive core heating at high frequency.

Dimensions SIOY2SV2 (in mm. 1 mm = 0.0394 inch)







Pins Arrangement

1. +15V
2. -15V
3. OUTPUT
4. 0V

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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