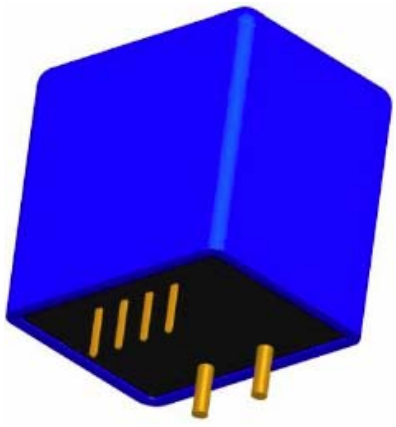


Features

- Galvanic isolation between primary and secondary circuit
- Hall effect measuring principle
- Isolation voltage 3000V
- Low power consumption
- Extended measuring range(3*I_{PN})
- Power supply ±15V

Advantages

- Low insertion losses
- Easy to mount with automatic handling system
- Small size and space saving
- Only one design for wide current ratings range
- High immunity to external interference.

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)**
SIOT1S10V2	10	±30
SIOT1S15V2	15	±45
SIOT1S20V2	20	±60
SIOT1S25V2	25	±75
SIOT1S30V2	30	±90

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

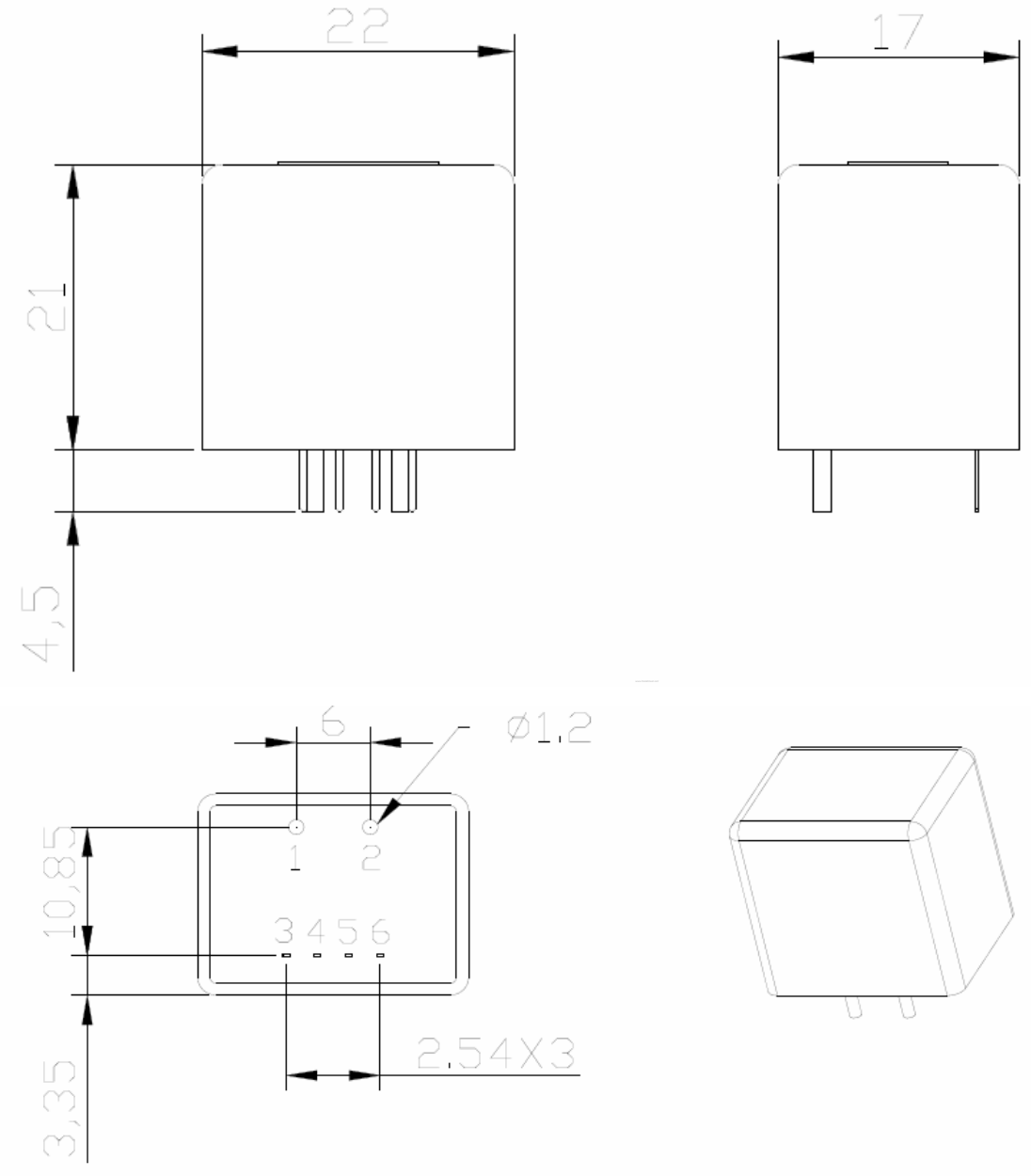
PARAMETERS	SYMBOL	UNIT	VALUE	CONDITIONS
Electrical data				
Supply voltage(±5%)(1)	V_C	V	±15	
Current consumption	I_C	mA	<±15	
Output voltage	V_{out}	V	±4	@ ± I_{PN}, R_L = 10 kΩ, T_A = 25°C
Output internal resistance	R_{OUT}	Ω	<50	
Load resistance	R_L	KΩ	≧10	
R. m. s voltage for AC isolation test	V_d	KV	>3	@50/60Hz, 1 min
Accuracy - Dynamic performance data				
Linearity(0…±I_{PN})	ε_L	% of I_{PN}	<±1	@ I_{PN}, T_A = 25°C
Accuracy(0…±I_{PN})	X	% of I_{PN}	<±1.5	@ I_{PN}, T_A = 25°C (without offset)
Electrical offset voltage	V_{OE}	mV	<±40	@T_A = 25°C
Hysteresis offset voltage	V_{OH}	mV	<±30	@ I_P= 0
Response time	t_r	μS	≦3	@ 90% of I_{PN}
Frequency bandwidth	BW	kHz	DC~50	@-3dB
Thermal drift of V_{OE}	V_{OT}	mV/K	±1.5	
Thermal drift of the gain	TCε_G	%/K	±0.1	
General data				
Ambient operating temperature	T_A	°C	-40 ~ +85	
Ambient storage temperature	T_S	°C	-40 ~ +105	

Notes:

1) Operating at ±12V< Vc < ±15V will reduce measuring range.

Dimensions SIOT1SV2M (in mm. 1 mm = 0.0394 inch)

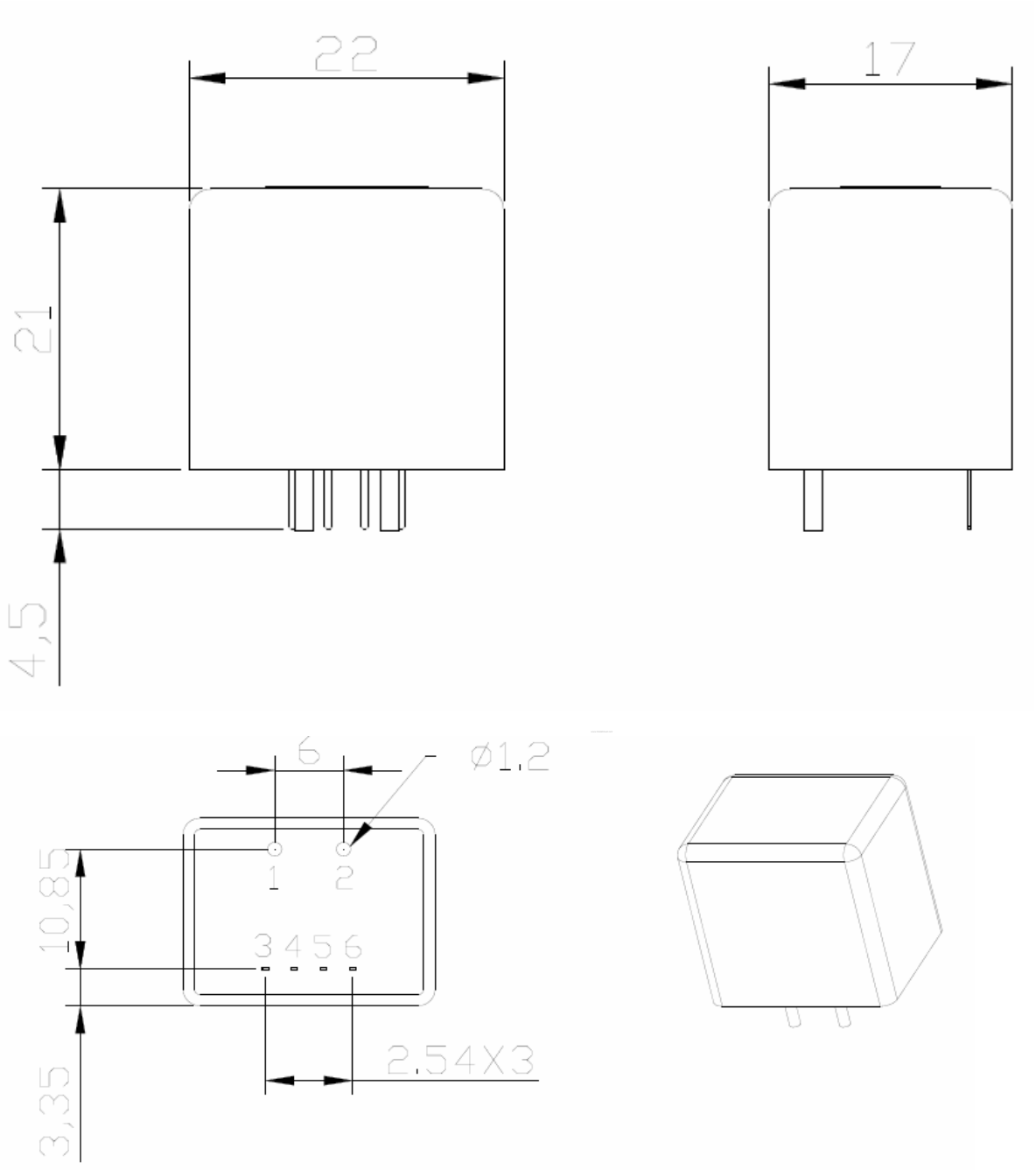
1) **SIOT1S10…15V2M**



Terminal Pin

1. Primary input Current(-)
2. Primary input Current(+)
3. Output
4. +15V
5. 0V
6. -15V

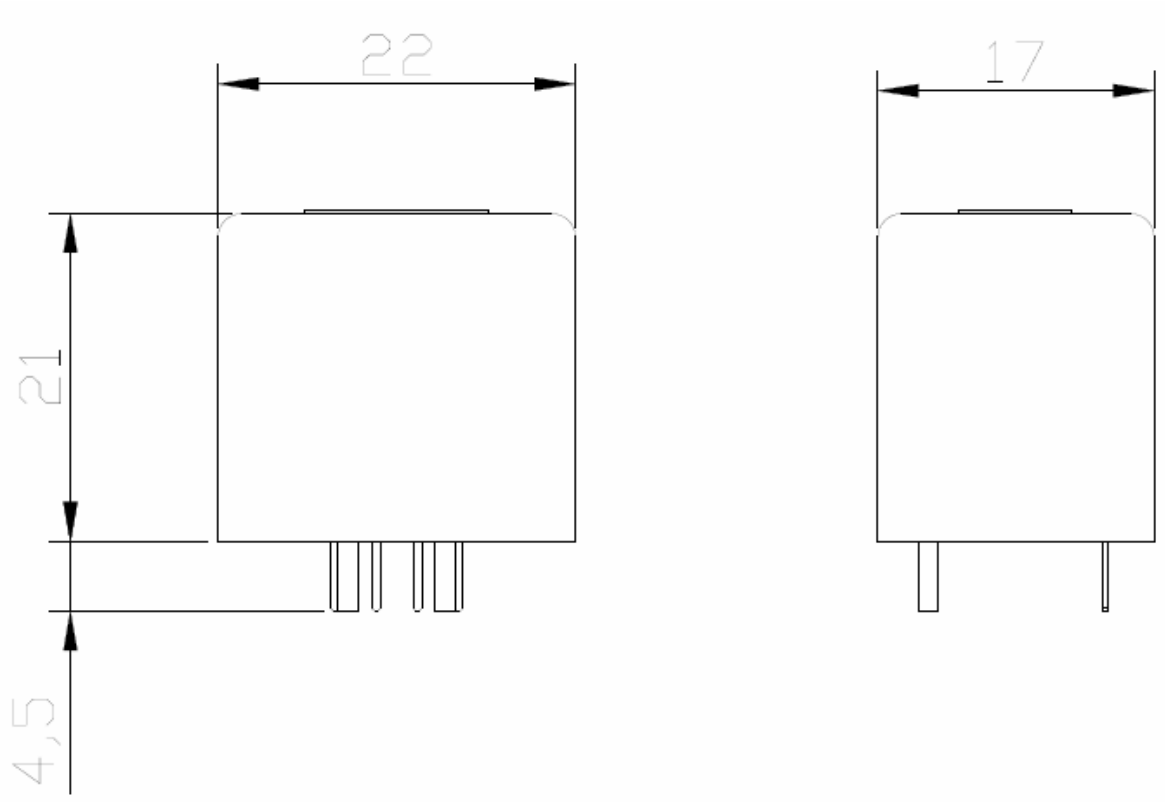
2) **SIOT1S20…25V2M**

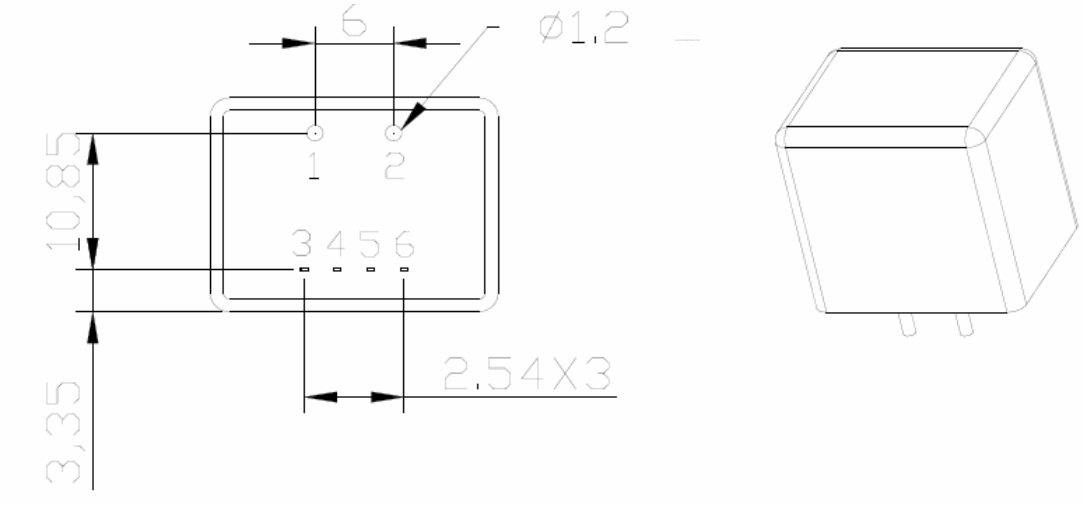


Terminal Pin

1. Primary input Current(-)
2. Primary input Current(+)
3. Output
4. +15V
5. 0V
6. -15V

3) **SIOT1S30V2M**





Terminal Pin

1. Primary input Current(-)
2. Primary input Current(+)
3. Output
4. +15V
5. 0V
6. -15V

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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